

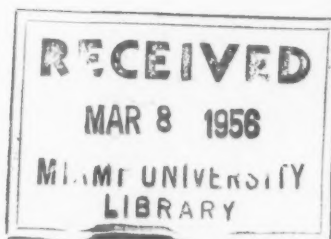
543

# ATHLETIC JOURNAL

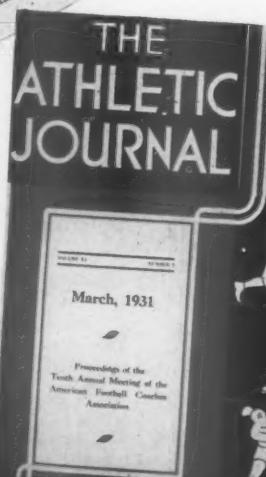
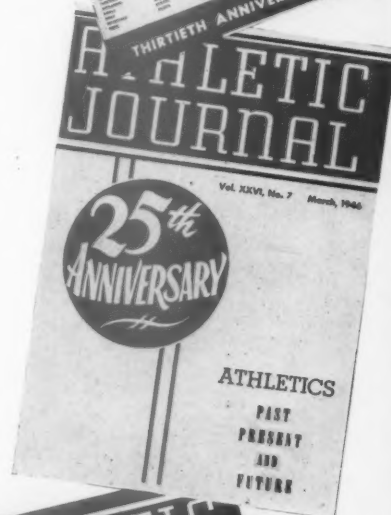
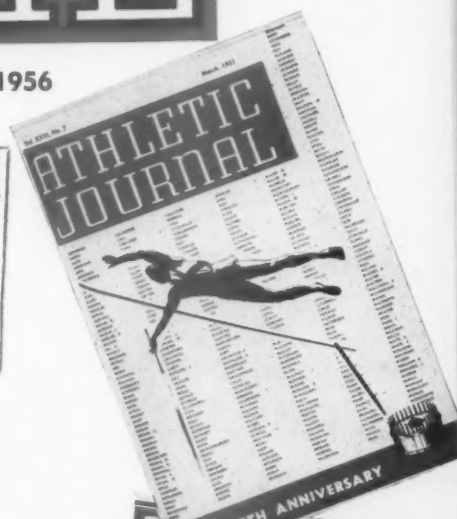
March 1956

VOL. XXXVI No. 7

March, 1956



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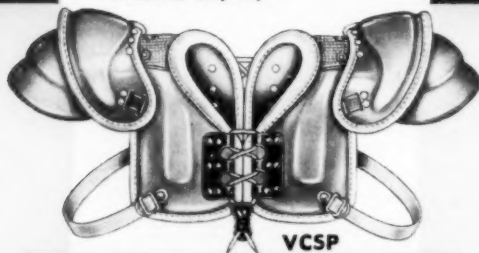


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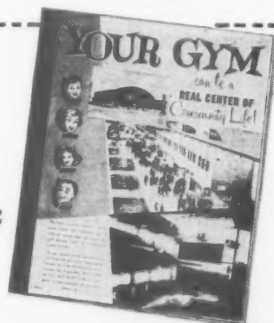
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1719 Howard Street

Evanston, Illinois

MAJOR JOHN L. GRIFFITH

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Published monthly except July and August by the Athletic Journal Publishing Company, 1719 Howard Street, Evanston, Illinois. Member Audit Bureau of Circulations. Request for change of address must reach us thirty days before the date of issue with which it is to take effect. Duplicate copies cannot be sent to replace those undelivered through failure to send advance notice.

Subscription Prices: \$2.00 per year; \$3.00 for two years; \$3.75 for three years; \$1.20 for six months; \$1.00 for five months; Canada \$2.50 per year; foreign \$2.75 per year. Single copies 25 cents for current volumes; 35 cents per copy for back volumes. Copyright 1956. The Athletic Journal Publishing Company. Entered as second-class matter at the post office at Evanston, Illinois under the Act of March 3, 1879; additional entry at Rochelle, Illinois.

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Nation-Wide Amateur Athletics

Volume XXXVI

Number 7

March, 1956

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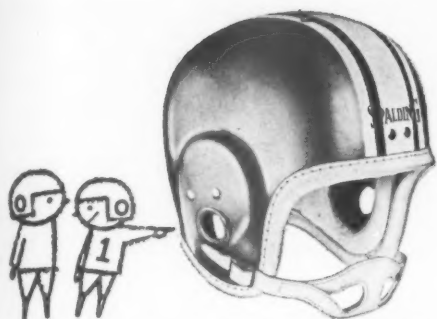
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## FRONT COVER ILLUSTRATION

This is a convenient place to express our thanks to the almost 20,000 subscribers and to the advertisers who make this magazine possible. We hope you will enjoy our birthday cake, so to speak.





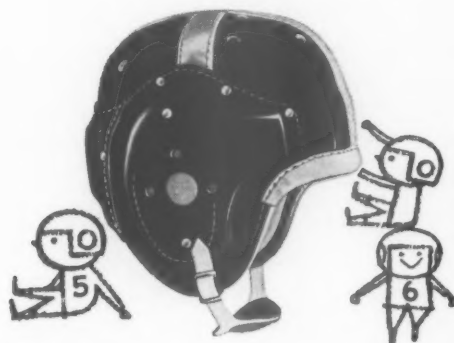
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# from here and there

IDAHO is adding association-sponsored state golf and tennis tournaments to its list of activities. Like many states, Idaho is studying the problem of reclassification of its schools for basketball . . . Illinois, after many years, has redesigned its state basketball tournament, and instead of sixteen teams going to the state finals, only the eight winners from the super sectionals will make the trip . . . Last fall Wisconsin allocated approximately \$16,000 for the purchase of face masks. The schools that entered the program received a face mask from the association for every mask which they purchased. Three hundred and three schools participated in the program, with 57 per cent of the boys on these squads wearing face masks. As a result, facial injuries were just about half the number expected, based on statistics from other years. Idaho is starting a similar program next year and we predict that other states will follow suit. Speaking of face masks — The Marietta Company has an eight-page catalog devoted exclusively to masks. A copy may be secured by using the Service Coupon in this issue . . . It isn't often that the speediest man on a football squad is the center. However, Burl Berry, Iowa State's popular track coach, was conference sprint champion and all-conference center at Iowa Teachers College . . . Jimmie Eckel, who has just completed 25 years of coaching in Illinois, Michigan, and North Dakota high schools, and is presently at Valley City, North Dakota, High School, attended Valley State Teachers College. His record there includes twelve letters in football, basketball, and track. He was all-conference fullback for four years, received honorable mention in basketball each year, and was conference low hurdle champion for all four years.

do not include football in their programs because of limited enrollment might take a lesson from Vermillion, Kansas, High School. During the 1954 season the school played a seven-game season of eleven-man football with a squad of 14 boys. There were only 16 boys enrolled in the school at that time . . . Belmont College at Nashville, Tennessee is competing in basketball for only the fourth season yet the school has published a basketball yearbook which could well be the envy of any number of larger and better known basketball powers. Larry Striplin, the basketball coach, served as editor of the yearbook.

SYRACUSE UNIVERSITY, one of the pioneers in night football, does not have a night game scheduled for next fall. This will mark the first season since 1929, when lights were installed, that they will not have played a night game . . . On the other hand, Abilene Christian College has a stadium expansion program underway which calls for the installation of the last word in lighting equipment. . . . Last month we mentioned that Penn State has only had four football coaches in the last 37 years. It has been called to our attention that in basketball they have only had six coaches in 60 years. Four of the six coaches are connected with the university at the present time: "Dutch" Hermann, coach from 1916 to 1933, is a history teacher; John Lawther, coach from 1937 to 1950, is an administrator in the physical education department. Elmer Gross, coach from 1950 to 1954, teaches at the school and John Egli is, of course, presently the coach. Ken Loeffler, whose basketball book is rapidly becoming a best seller, captained the 1924 Penn State team that won 13 out of 15 games . . . Tom Botts has compiled an enviable record in the always tough and track-conscious Big Seven Conference. In 20 conference meets his teams have taken six titles, finished second four times, and third three times . . . In

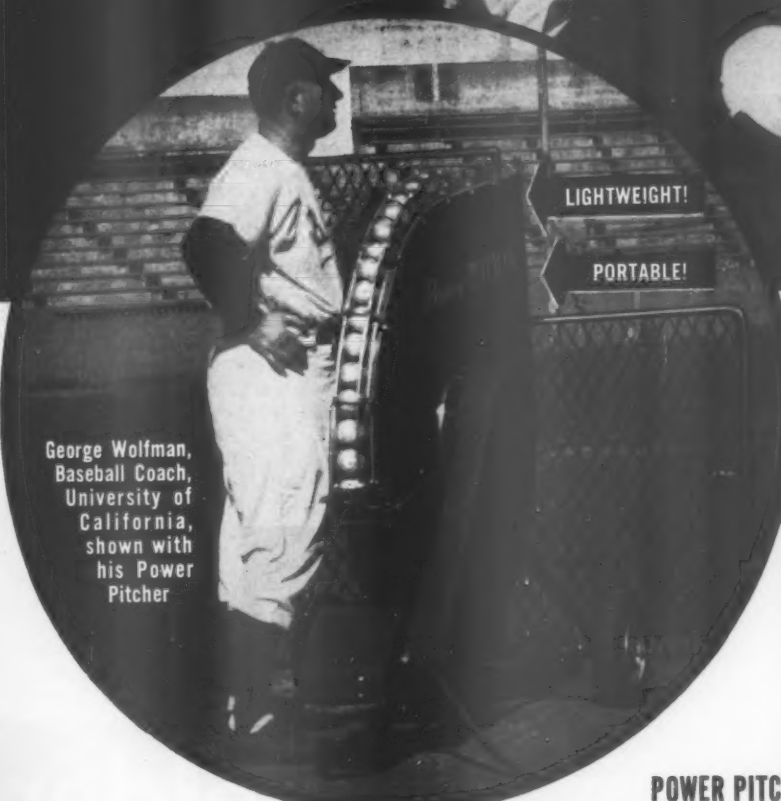
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THE Minnesota schools voted down by a two to one margin a proposal to establish A and B classifications for basketball . . . Schools that

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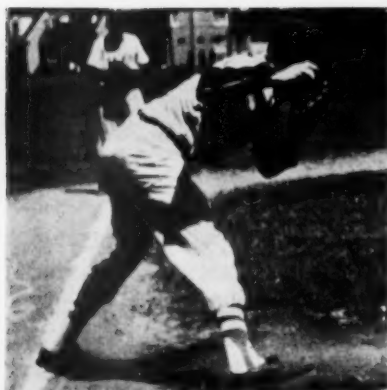
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## THE THROW TO THIRD ON A BUNT



## Series A



A pitcher's job is quite an involved one. Not only does he rely upon his pitching arm, but he is a fielder as well — a ninth fielder on the team. Further, he is in the center of the infield positions. He must be fast on his feet and quick with his hands in the process of fielding his position. He must be as accurate with his throws as are his teammates. He must field



bunts accurately and quickly. He must field and knock down hard-hit balls. Covering bases and backing up bases are also his duties. Occasionally he makes a tag play. In reality, he has a combination of the duties of a pitcher and an infielder.

### Fielding Bunts

A good fielding pitcher anticipates a bunt. Generally speaking, each batter is regarded as a potential bunter. As a rule, when the pitcher acknowledges this possibility he is ready to field a bunt with speed and ease. In fielding bunts to the first base side, the right-handed pitcher usually places his glove ahead of the rolling ball, on the first base side of it, and scoops it into his mitt with his bare hand. Then he straightens up, double steps, and throws.

The left-handed pitcher usually overruns the ball slightly, uses his glove to stop the progress of the ball, scoops it into the glove with his bare hand, spins on his left foot until he faces first base, and then throws to that base (Diagram 1).

In fielding bunts toward the third base side of the infield a right-handed pitcher must learn to field the ball just inside and toward the front of his right foot, slide his weight over his right foot for throwing power, step toward first base with his left foot, and throw. Thus the time involved in double-stepping is saved. Since the throw is longer on a third base side bunt, body actions in throwing must be quicker and held to a minimum.

A left-handed pitcher should field the bunt down the third base side by placing his glove in front of the ball

# The

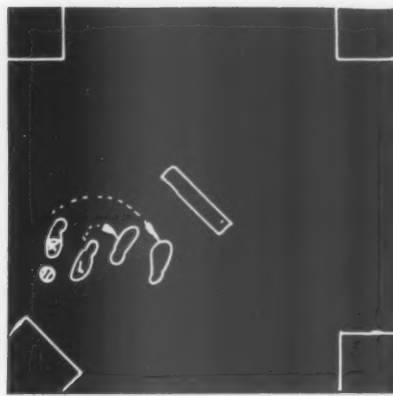
# Ninth

# Fielder

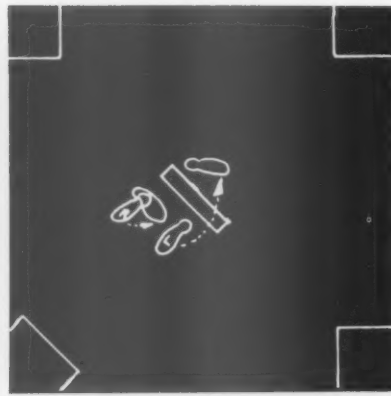




**Diagram 1 shows a left-handed pitcher's footwork in fielding a bunt to his left and throwing to first base.**



**In Diagram 2 we see a left-handed pitcher's footwork in fielding a bunt to his right and throwing to first.**



**Diagram 3 shows a right-handed pitcher's footwork in throwing to second base after fielding a batted ball.**

to stop its forward progress, scoop the ball into his glove with his throwing hand, spin on the ball of his left foot in order to face first base, and then throw to that base (Diagram 2).

All throws to first base should be on the inside (fair territory side) of the base to avoid hitting the baserunner with the ball.

In throwing to second base for a force play on a bunt, the footwork in fielding the bunt is similar to that just described, except for a larger foot pivot by a right-handed pitcher in making the throw, and a shorter foot pivot for the left-handed pitcher. On this play the throw to second base should be chest high and one step to the third base side to give the shortstop who is taking the throw time to touch second base.

The throw to third base for a force play on the bunt involves a larger pivot for the right-handed pitcher, and practically no pivot for the left-handed pitcher. On this play the right-handed pitcher overruns the ball with his right foot, fields the ball inside of and toward the front of his left foot, pivots on his right foot toward third base, steps with his left foot toward third base, and throws (Series A). The throw should be of the low sidearm variety since time is of the essence on this play.

In fielding squeeze play bunts the pitcher should use his throwing hand whenever possible to save time in making the toss to the catcher. If he is close to the receiver, the toss should be underhand and knee high to the tagging side of home plate.

#### **Fielding Ground Balls**

The pitcher should field ground balls well out in front of his body. He

should scoop or shovel the ball with his glove similarly to an infielder. Fielding in a pepper game provides good ground ball fielding practice. The pitcher must bear in mind that should any slowly batted ground ball escape him, it will probably reach an infielder too late to be turned into a put out.

#### **Fielding the Hard Smash**

The hard smash must be caught or

**J**IM SMILGOFF started to write for us in 1944. Since that time he has written many thought-provoking articles on his favorite subject, baseball. He has directed training camps and served as a scout for the Chicago Cubs, served as consultant on baseball films, and is the author of the new text, "Winning High School Baseball," which is reviewed in this month's book review column.

at least slowed up or deflected, since it will often result in a base hit when left untouched by the pitcher. Most pitchers use a big glove because it helps in knocking down or slowing up hard smashes.

When a hard ground ball is caught by the pitcher with base-runners on first and second or first and third and less than two out, the throw

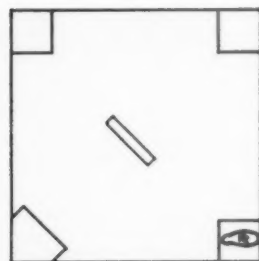
should be made to second base to start a double play. On this throw the right-handed pitcher should turn to his left and the left-handed pitcher to his right. The throw should be aimed one step away from the receiving fielder's side of second base (Diagram 3). When all bases are occupied and the hard ground ball is caught by the pitcher, the throw should be made to the catcher for the start of a double play. This throw should be aimed chest high and toward the first base corner of home plate.

#### **Covering the Bases**

**Covering First Base.** Whenever a ground ball is hit to the left of the pitcher he should start toward first base to cover that base if necessary. On ground balls hit deep to the first baseman or far to his right side, help is needed in the form of someone covering first base for the put out. The pitcher must provide this help. He should start toward first base immediately after the ball is hit, and run to a point just inside the foul line and approximately 15 feet short of first base. Then he circles to his left and continues toward first base. The throw should be received from the first baseman while the pitcher is a step or two away from first base (Series B). The pitcher can then catch the ball, and look down to touch first base with his right foot. Should there be another runner on base the pitcher must be careful not to overrun the base too far, thus allowing this other runner to advance two bases instead of one. In this situation a right-handed pitcher should tag first base with his right foot, take another step with his left, and then

**By JAMES SMILGOFF**

**Baseball Coach  
Taft High School  
and author of the  
new text "Winning  
High School Baseball"**



In Diagram 4 we see a right-handed pitcher's footwork in turning to throw after covering first base.

pivot and be ready to throw while facing the infield as his right foot touches the ground two steps beyond first base (Diagram 4). Most left-handed pitchers take three steps beyond first base in this same situation (Diagram 5). An occasional left-handed pitcher may learn to take one step beyond first base, pivot, and turn to throw.

Some pitchers like to cover first base by running directly to the base without circling. Then they place the right foot against the front side of the base, and reach for the throw just as a first baseman would.

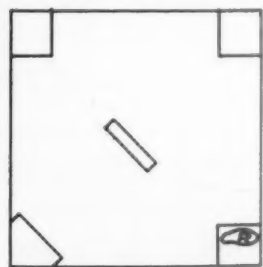
## (Series B) COVERING FIRST

Occasionally, on a pop fly behind the first baseman, it becomes necessary for the pitcher to cover first base. This is especially true when there is a runner on base and the catcher cannot leave his position to cover the initial base.

The pitcher should also hustle over to cover first base when he traps a runner off that base on a pick-off attempt. In the ensuing run down he must cover first base until some other player is able to get there to take his place.

*Covering Second Base.* When the second baseman and shortstop both

Diagram 5 shows a left-handed pitcher's footwork in turning to throw after covering first base.



go for a fly ball in short center field, second base is left unguarded. It then becomes the pitcher's duty to cover this base. Should the base be covered by the first baseman, the pitcher would then cover first base. When second base is covered by the third baseman on this same short fly ball, the pitcher would then cover third base.

**Covering Third Base.** When the

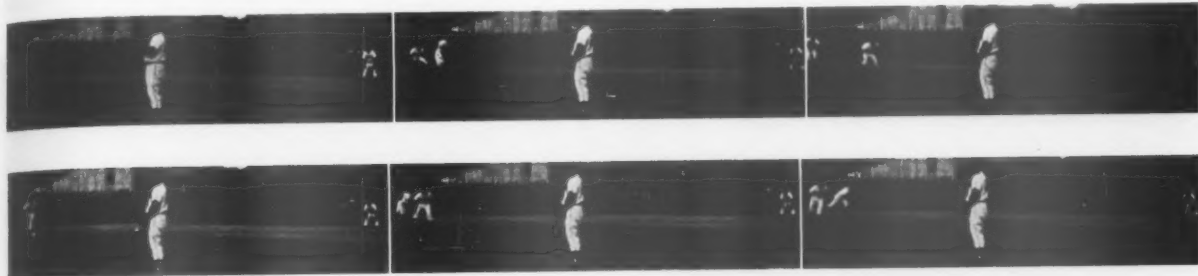
shortstop and third baseman run toward left field on a short fly ball in that area, the pitcher should cover third base, particularly when there is a runner already on base.

**Covering Home Plate.** On wild pitches or passed balls with a runner on base, it often becomes necessary for the pitcher to cover home plate. When this happens he should place his left foot just in front of the in-

side corner of home plate with his right foot parallel to it and just inside the third base foul line (Series C). In this way the base-runner is forced toward the back side half of the plate, and the pitcher has a good tagging angle.

When the catcher tries for a foul fly with a base-runner on third base, it becomes the pitcher's duty to cover

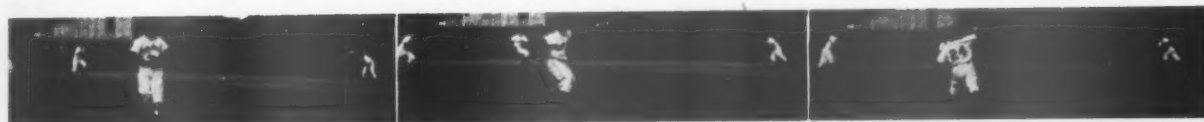
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# The Pick-Off Play

By **MARTY KAROW**

Baseball Coach, Ohio State University



**A** defensive maneuver which is used by all good baseball teams in every classification of ball is the pick-off play when there is a runner on second base. This play involves the pitcher, the shortstop, and second baseman. There are many other pick-off plays which are used between other players, but in this article we will discuss the one mentioned and the method which we use at Ohio State University.

At Ohio State our pick-off play is started by the shortstop who gives a signal to the pitcher which tells him the play is on. The play is started upon the pitcher's look toward home plate. This look is the signal for the shortstop or the second baseman to break for the bag to handle the play. The pitcher looks to the plate and counts one, two, turn, and throw, a

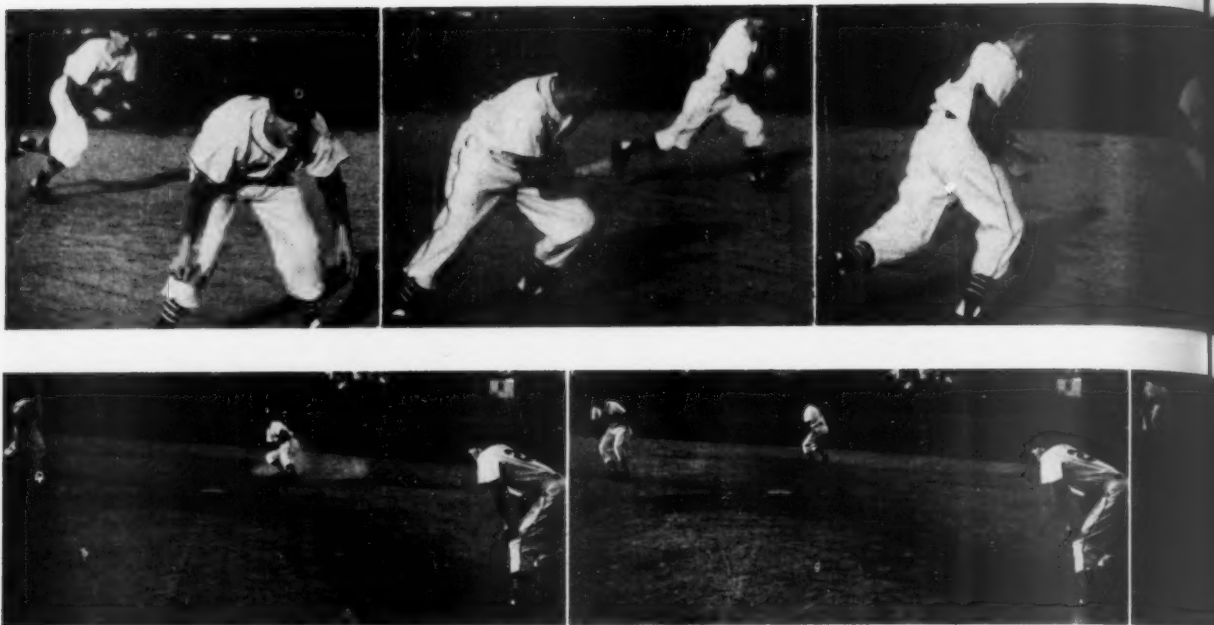
count of four. He turns to his left one-half turn, falling off the back of the mound and stepping with his free foot in a direct line toward second

**T**HIS article by Marty Karow is a follow-up to last month's gem entitled "The Keystone Combination." Marty has had an outstanding career as an athlete and coach, and is at present conducting clinics in Japan for the Air Force.

base. This helps him judge the direction of the base and prevents bad throws.

In our pick-off play both the shortstop and the second baseman are in-

involved. The play is handled in the following manner. We have a certain signal, or signals, which are given by the shortstop to the pitcher. When the pitcher takes his look at the runner on second he receives the signal from the shortstop. The signal we use is the open mouth which is executed in the following manner. As the pitcher looks back toward second to hold the runner on, he looks at the shortstop. If the runner is taking too big a lead, the shortstop opens his mouth and looks directly at the pitcher. He continues to look at the pitcher, using his open mouth as a signal. This means the play must be run and that the pick-off must be tried before the pitcher pitches to the batter. Otherwise, the shortstop will have broken for the bag the moment the pitcher looks to the plate, thus leav-



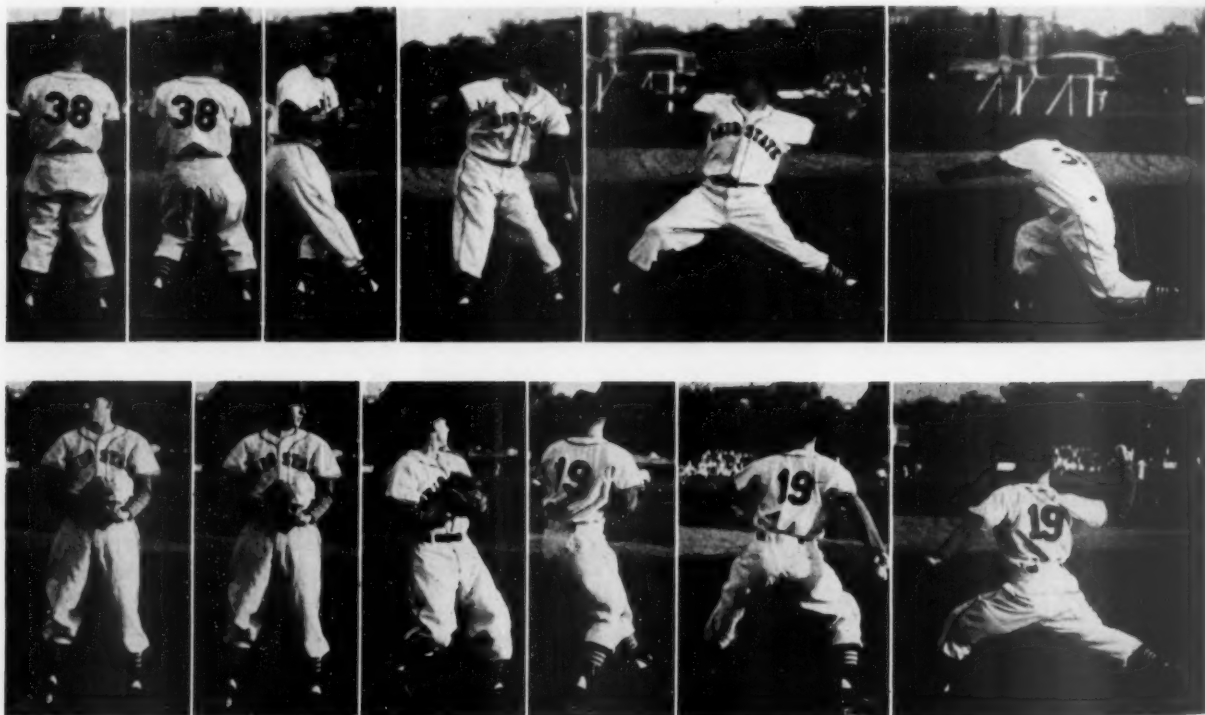
ing his position wide-open for base hits.

On the pitcher's look to the plate the shortstop breaks for second base. The pitcher looks to the plate and counts one, two, turn, and throw. On the last two counts he turns and throws. Then he turns to his left, makes a complete one-half turn in that direction, and throws to the shortstop at second base. We tell our

pitchers that they should line up their feet as they take the stretch and then on the turn just to fall off the back of the mound. In this way they turn enough so they end up in an open stance, with the left foot to the left of a direct line from the right foot, or the foot that is on the rubber. This movement will prevent wild throws to second base which would result in the runner on second base

being able to advance. If the pitcher does not step far enough around, he will be forced, because of the position of his left leg or free leg, to throw against a stiff leg which makes it much more difficult to control his throw.

In order to vary our play we add what we call a change-of-pace pick-off play. Everything is run the same as it is in the play we just explained ex-







(Top Series)

## SHORTSTOP'S PLAY

(Series Above)

## SECOND BASEMAN'S PLAY

cept for a slight variation at the start of the play. The pitcher looks back toward the shortstop and the baseman, and the shortstop who has the signal immediately fakes the runner back toward second base. Then he moves off toward his position, and the runner who has been faked back toward the bag will also move off or away from the bag again. Our pitcher sees the signal, and when the shortstop fakes immediately after giving

## LEFT-HANDER'S PIVOT



## RIGHT-HANDER'S PIVOT

the signal, he knows that the change-of-pace pick-off is on. The pitcher continues to look back toward the shortstop and runner, watching the runner as he moves off from second base. Then the pitcher looks toward home plate and this look is the signal for the shortstop to break for the base. When the pitcher looks toward the plate he starts his count — one,

two, turn, and throw. Thus the shortstop or second baseman is given four counts in which to get to the bag in order to handle the throw. By getting there slightly ahead of the throw, they are able to adjust and handle the throw should it be bad or wild.

We also involve the second baseman in our pick-off play. In this case the shortstop gives a second signal. On the pitcher's look at the runner, the shortstop gives the open-mouth signal which means the pick-off play is on. Then he immediately looks away from the pitcher to either side or down at the ground. This look-away signal means that the second baseman is to be in on the play. Consequently, the pitcher waits until the shortstop makes the fake in order to force the runner back toward second base. Again the pitcher watches the runner, and as he starts to move off second base for his lead, the pitcher looks toward the plate, and starts his four count — one, two, turn, and throw. Then he goes through with his part of the play so it will be timed properly. The second baseman, realizing from the signal given by the shortstop that he is to make the pick-off play, watches the pitcher and when the pitcher looks to the plate the second baseman breaks for the bag. After taking his count, the pitcher turns and throws to the second baseman who picks the runner off the base.

The pick-off play should be run even if it only works occasionally because it makes the runners more cautious and will prevent them from

taking too large a lead. Thus the outfielders are given a better chance to throw the runner out at the plate whenever he attempts to score on base hits to the outfield.

There are many methods used to run the pick-off play and the pitcher can turn in either direction when he is making his pivot and throw. However, we feel that in turning to his left the pitcher makes the play appear to be a legitimate pitch and, consequently, helps the success of the play. The pivot or turn to the pitcher's right (right-handed pitcher) has one advantage in that he picks up his target sooner and does not lose it. This method is somewhat safer, but it is not as effective.

With a left-handed pitcher the signal can be given by the second baseman and run the same way. The pitcher makes the same type of pivot or turn and also uses the same count. Sometimes this count can be shortened to a three count maneuver such as one, turn, and throw. Shortening the count depends upon the speed of the infielder in getting to the bag. We feel it is best to run the play slower because the timing is better. In order to protect the play our pitchers are told to take more than one look toward second base. In this way the shortstop can put the play on at any time, preventing the base-runner from taking advantage and getting a good break toward third, thus beating the play. If the pitcher will look several times, then he can protect himself and his infielder on the play.



# The Discus Throw

By NORRIS C. DEAN  
Track Coach, Georgia Tech

**T**HIS article will deal exclusively with Carl Vereen and his development as a discus thrower from high school participation through his sophomore year at Georgia Tech.

In order to achieve maximum results we use the simplest orthodox methods. Vereen began his track career as a junior at Miami, Florida, High School, when he was 16 years old, 6 feet, 4 inches tall, and weighed 190 pounds. During his first year of competition Carl's best marks were 155'3" in the discus and 49'1" in the shot. When the time arrived for his senior year of high school competition he was 6 feet, 6 inches tall, and weighed 210 pounds. His best efforts were 173'4" in the discus and 56'6" in the shot.

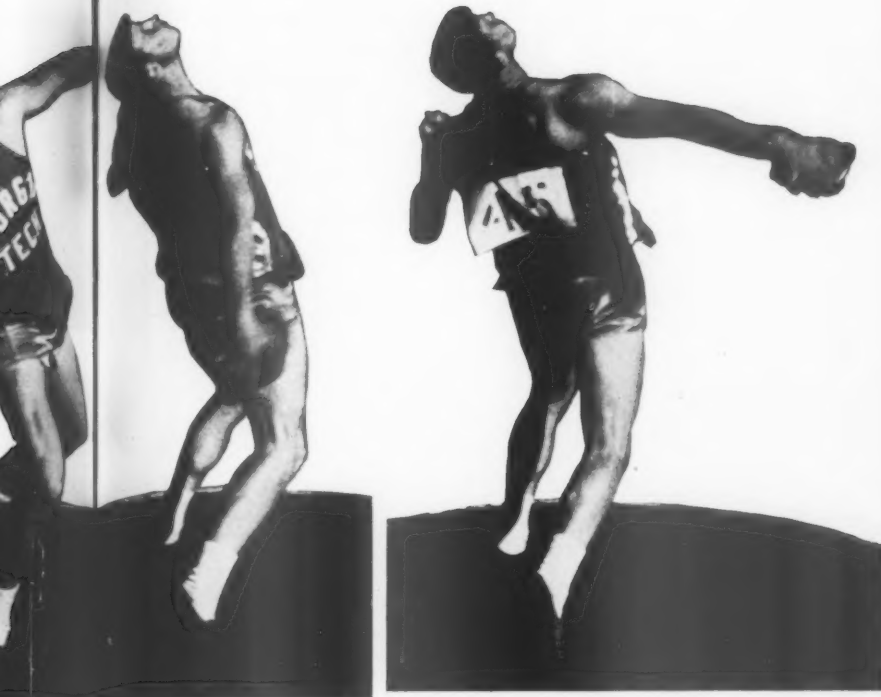
When Vereen came to Georgia Tech he had a few faults, but basically his form was pretty good.

He never used his left arm which made him throw his head hard to the side. This movement resulted in his pulling away from the discus, and falling away from the throw. To correct this fault all we did was have

him overemphasize the use of his left arm until it became a natural movement, hold his head in a natural position and use it as a pivot.

Overemphasis of leg drive caused him to leave the ground before the release of the discus. To correct this fault we emphasized the relaxing of his legs and knees. If this does not do the job, we try having the boy throw with slightly bent knees, never allowing his legs to straighten out throughout the throw. After the throw becomes fairly well timed with the knees slightly bent, the thrower has learned to relax, and from that point on he gets the natural lift necessary for a well-coordinated throw.

Illustration 1 shows the start of the turn. Vereen's left arm is bent at a right angle (some throwers prefer a straight arm) with his hand in front of and just below his chin. His right arm is relaxed and straight, with no tension, which allows the discus a natural drag. His knees and legs are relaxed to permit a natural crouch, that is not forced, in order to get a good lift on delivery. On the initial



stance his feet are close together to allow more room for the turn and the leg spread follow-through.

On the turn his hips are kept in a position in line with his head and feet to insure balance. Carl uses a slight body bend at the hips to gain the necessary crouch for delivery (Illustration 2).

In Illustration 3 we see Vereen's left arm in a good position. His right arm is a bit too low which causes the discus to turn up at the end of its flight. His left foot is moving naturally into the second step of the turn and its height from the ground is of no concern. We believe with fewer details to remember, the thrower is able to achieve better coordination.

Illustration 4 shows the discus still a bit too low. Carl's left arm may be too far to the front. However, his

crouch is such that the throw can be made without having to lift his body weight to get into a throwing position. His hip drag and relaxation are good.

Vereen's left foot lands slightly to the left of his right foot with a good leg spread for power and drive on the throw. His chin is up slightly to allow more freedom of body, arm, and leg movement. The discus is probably still a bit too low. This is one of Carl's faults (Illustration 5).

Illustration 6 shows perfect coordination. Carl has a tendency to throw his head too far back or pull it to the left to get more power in his right arm instead of using his left arm.

Illustration 7 shows Vereen's left foot about 6" to 10" from the front of the ring. This distance permits a good forward pull and follow-through without stepping out of the ring with his right foot as it comes through after the throw. His arm is relaxed and effort is made with his shoulder.

In Illustration 8 it will be noticed that the discus has been thrown before Carl's right foot leaves the ground. Maximum effort is insured because his feet are planted, permitting his arms and legs to give good relaxed effort when throwing.

The job is finished and the follow-through keeps Vereen from falling out of the ring (Illustrations 9 and 10).

(Continued on page 62)

**N**ORRIS DEAN graduated from Georgia Tech in 1935, after becoming the first Tech track man to score 100 points in a season in dual meet competition. He competed in both sprints, both hurdles, the mile relay, shot put, broad jump, and discus. Dean joined the staff at Georgia Tech in 1937 as an assistant in football and track, becoming head track coach in 1944.



# Teaching the Pitch Shot

By **CONRAD REHLING**  
Golf Coach, University of Florida



**T**HE pitch shot is the golfer's jinx, and the teacher or player cannot expect too much accuracy during the initial learning stage. All golfers could play better golf if they understood the principle of the use of the pitch shot. Most of the time this shot is played with the club moving into the ball in a downward blow. The beginner is usually confused about the difference between the chip and pitch shots. To help understand the shot it is necessary for the player to realize that when the ball is within 20 yards of the green it is a chip shot; when the ball is farther away it is a pitch shot. The chief difference between these two shots, at least in relation to the use of the body, is that where a pitch shot calls for a moderate amount of body movement, a chip shot requires no movement of the body worth mentioning.

## When to Use the Pitch Shot

For the most part, experience will determine when this shot should be used. Beginners, as a rule, want to use the No. 7 iron through the wedge

to hit the pitch shot inside of 20 yards. While many good golfers are able to use these clubs well, in the case of a beginner it is one of the most difficult shots. To learn this shot a beginner should not attempt to practice it from more than 50 yards out. The beginner is concerned mainly with getting the ball into the air before he is ready to get distance and direction. Therefore, the beginning golfer should strive to learn this shot from a short distance away from the green in order to learn to control the clubhead as it comes into the ball.

## What Any Golfer or Teacher Should Know in Learning the Pitch Shot

Why is the pitch shot so difficult for most golfers? The main reason is that the club has such a deep-lofted face, control is made difficult. Why does the ball go high when it is hit with the No. 9 iron? Simply because of the loft, plus the fact that the ball will have spin on it, thus making it stop sooner than on the other shots. When the ball is contacted, it slides

up the lofted club which makes for backspin. When the ball lands, the spin causes it to slow up as though it had brakes. This shot, when hit by the expert, will very often actually jump backwards or to one side or the other. The beginner tries and tries to get the same result, but it will take long, hard work before he can come close to making the ball jump as it lands on the green. The important thing for the beginner is to get the ball to go in the air consistently and to forget the direction and distance. A learner must understand the principle of hitting down on the ball.

One of the difficulties in teaching the full swing is that when the short pitch shot is hit, there is a tendency to hit the ball too hard, thereby losing control of the clubhead. The pitch shot is a control shot and must be thought of as such for the best results. First of all, the beginner must have confidence that the club will take the ball into the air, and he should visualize that his hands guide it into the air. When the principle of hitting down on the ball and into the turf is realized, the learner is on

his way to developing a correct pitch shot.

## Fundamentals of the Pitch Shot

Beginning golfers must realize the importance of the grip because the club is controlled mainly by the player's hands as they come into the ball. The overlapping grip should be used. Each student should make sure that the three knuckles of his left hand are seen as his hand is across the shaft of the club. When the hands are put on top of the shaft, most beginners find the ball will go to the right. If the left hand is over, the blade of the club will come into the ball correctly. The club should be gripped firmly but not so tightly as to cause tension in the wrist. The player's right hand is placed on the shaft with his little finger overlapping the forefinger of his left hand. The little finger of his right hand may be placed under the forefinger of his left, coming between the first and second fingers and resting upon the back of his hand. Completing this grip, the inverted V of

(Continued on page 48)



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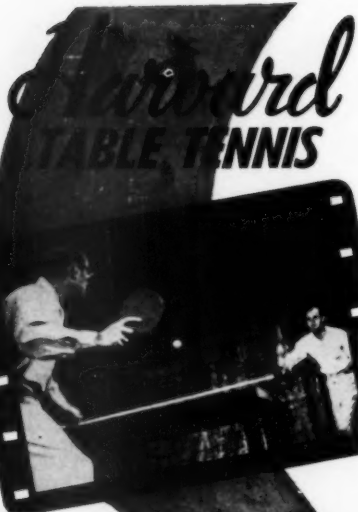
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# Fundamental Basketball Skills of College Freshmen

By **GERALD A. VROOM**

Assistant Varsity Basketball Coach, San Jose State College  
and

**JOHN E. NIXON**

Assistant Professor of Education and Physical Education, Stanford University

**N**ATURALLY, college basketball coaches are interested in the level of ability in the fundamental skills of the game possessed by entering freshmen basketball players. Likewise, high school coaches appreciate receiving the judgment of college coaches as to the strengths and weaknesses their players have upon completion of their high school basketball playing careers. The following study was undertaken to provide useful information and opinions for high school and college basketball coaches as a guide to improved coaching practices at both levels.

This study is limited to a consideration of twenty-six fundamental bas-

ketball skills which were selected after thorough discussion with many experienced coaches at both the high school and college level. These skills were classified as either offensive or defensive skills. Such factors as attitude, desire, sportsmanship, co-operation, etc., were not considered in this study.

Forty-two four-year college and university basketball coaches west of the Rocky Mountains were selected for the study, because their institutions play representative basketball in the western part of the United States.

A questionnaire was developed in which sixteen offensive and ten defensive fundamental skills are describ-

(Continued on page 53)

Table 1

### PLAYER ABILITY QUESTIONNAIRE

Please check proper space

EXCELLENT-FAIR-AVERAGE-FAIR-POOR

| 1  | 10 | 15 | 2  | 5  | Set shooting                   |
|----|----|----|----|----|--------------------------------|
| 3  | 15 | 9  | 6  | 1  | Jump shooting                  |
| 2  | 13 | 12 | 4  | 2  | Lay-up shooting favorite hand  |
|    |    | 1  | 14 | 18 | Lay-up shooting, opposite hand |
| 3  | 10 | 14 | 5  | 1  | Free throw shooting, one hand  |
|    | 6  | 6  | 4  | 17 | Free throw shooting, two hands |
| 12 | 19 | 2  |    |    | Dribbling, favorite hand       |
| 2  | 2  | 10 | 19 |    | Dribbling, opposite hand       |
| 4  | 9  | 13 | 7  |    | Ball-handling                  |
|    | 10 | 17 | 5  |    | Footwork                       |
|    | 12 | 14 | 6  |    | Faking                         |
| 1  | 6  | 12 | 14 |    | Feeding the post               |
| 4  | 11 | 5  | 13 |    | Following the pattern          |
|    | 14 | 8  | 9  |    | Setting and use of screens     |
| 2  | 16 | 9  | 4  |    | Rebounding, following a shot   |
| 5  | 18 | 7  | 3  |    | Ability to drive               |

### Defensive

| 2 | 1  | 15 | 15 | Footwork   |
|---|----|----|----|--|
| 1 | 2  | 13 | 17 | Ability to stay with a man in the man-for-man defense    |
| 1 | 6  | 15 | 9  | Ability to press   |
|   | 5  | 7  | 20 | Talking on defense                                       |
| 3 | 5  | 14 | 11 | Switching in a man-for-man defense                       |
| 1 | 10 | 13 | 9  | Stance, body balance, etc.                               |
|   | 7  | 16 | 9  | Individual position in relation to the man with the ball |
| 3 | 11 | 12 | 7  | Use of the hands, distraction, position, etc.            |
| 2 | 5  | 10 | 16 | Rebounding, blocking out                                 |
| 1 | 6  | 14 | 12 | Development of split vision                              |

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# Reducing Early Season Football Injuries

By DR. JAMES A. BAILEY,

Associate Professor, State University of New York, Cortland, New York

**M**ANY high school and college football players return to school in the fall in poor physical condition. As a result, considerable valuable time is lost in bringing the players to the level of physical condition required to play football well and safely or in a number of athletic injuries incurred during the early part of the season which may spell disaster to the team's hopes for a successful season. It seems advisable to place some responsibility for a boy's fitness status in his own hands. Most players will assume this responsibility if they understand and appreciate its importance.

At Ohio Wesleyan University, where we taught before coming to Cortland, all players received a mimeographed copy of the following syllabus. Perhaps other busy high school and college coaches and trainers might like to make use of this idea which would save them some time. The syllabus is written for and directed to the players themselves.

## An Ounce of Prevention

Prospects for an unusually successful season looked good in September. Several promising freshmen had entered school and not one of last year's first string players had graduated. The sports writers had predicted an undefeated season. Yet at the end of the season the record showed a two won seven lost record. Only the first two games had been won. As the season progressed, an increasing number of key players watched their team go down in defeat — they watched from the stands. Each one of these players was unable to play because of an athletic injury — an injury which might have been avoided if the individual players had made the proper preparations for the season.

At the end of that season the coach decided to institute a between-season's conditioning program to make the bodies of his players stronger, tougher, and more resilient in order that they could better withstand the rigors of football without suffering an unnecessary injury. He knew his boys had the ability and spirit to win if they could play at their full capacities throughout the season.

This is a story but there is a great deal of truth in it. The situation has occurred many times at many different high schools and colleges.

## A Point of View

Many collegiate athletes have missed the enjoyment and prestige of participation in key games because of injuries. Others have not been able to perform at 100 per cent efficiency throughout the season because of restrictions placed upon their performance due to injury. These injuries are unfortunate not only because of the discomfort they cause, but also because it is irritating when we cannot play at our best. Further, these injuries may seriously hamper the team's chances to play its best. Coaches plan offensive and defensive strategies in such a way in order to capitalize on the particular abilities

**J**AMES BAILEY graduated from Illinois and started his coaching career at Duke. He organized the sport of gymnastics at that institution. In 1949 he left coaching in order to complete work for his doctor's degree at Ohio State. Next he served as gymnastics coach at Ohio Wesleyan, and this past year joined the faculty at Cortland, New York.

of the various players. When a member of the squad is injured it often becomes necessary to change the strategy completely. This may mean that many hours which have been spent learning certain plays and formations have been completely wasted. A player owes it to himself, to his team, to his coaches, and to the school he represents to decrease the likelihood of injury.

Injuries occur in all sports. They also occur in the home, in cars, on the streets, and at places of employment. For an individual to be continually fearful of injury is foolish. It is also inefficient. It is one thing to be fearful of injury but it is quite another to be aware of the hazards and to prepare for them. Hotels are fireproofed not because of fear but because of intelligence. Only stupid drivers will drive with defective brakes. We all recognize and accept the desirability and the common sense of precautions of this type. The principle is the old Boy Scout motto "Be Prepared." Unfortunately, athletes often consider precautions a sign of weakness.

A football player can prepare himself for the approaching season. In fact, he is obliged to prepare himself. The following exercises were designed to show the specific procedures to be followed. No attempt has been made to list either procedures or injuries according to their importance. Little if any of the factual material is new; it has merely been adapted to the football situation.

## Construction of the Knee Joint

Fortunately serious knee injury (tearing of the disc, cartilage or meniscus — all refer to the same part) does not occur very frequently. Most knee injuries are due to ligamentous sprain. With our trainers, physical therapists, therapeutic equipment, team physicians, and Mother Nature, the latter type of knee injury will heal in one or two weeks. The former (tearing of cartilage) may necessitate surgery. Modern surgical procedure will almost invariably return the knee to full efficiency in the event of a cartilage injury. Surgery is usually not required for ligamentous sprain.

The knee joint is the largest joint in the body and from the architectural point of view, one of the weakest. Actually, however, the knee joint is one of the strongest joints in the body. It owes its strength to the arrangement and number of ligaments and to the tendons passing over it.

(Continued on page 39)



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# The Catching Game

By JAMES B. MALLORY

Baseball Coach, East Carolina Teachers College

ONE requisite for a good baseball team is strength down the middle. This strength includes the catcher, shortstop, second baseman, and center fielder. However, we have never seen a great baseball team that did not have an excellent catcher. His duties and decisions are innumerable, and often a game is won or lost on his judgment.

The catcher must be durable, smart, aggressive, and a continual chatter-box. He should exuberate confidence which in turn transfers to his pitcher and other teammates.

In giving signals, the catcher's feet should be together. They should also be pointed straight ahead. His trunk is bent forward slightly. The catcher's left arm rests on his left thigh, and the pocket of his glove is turned in. This prevents the third base coach from stealing the signals. Signs are given with his right hand against the inside of his right thigh. Some catchers prefer to place their feet parallel, while still others have the left foot slightly in advance of the right. Besides these signs with the pitcher, the catcher should also have a pitch-out sign with the pitcher, first baseman, and third baseman. He may also have a pick-off sign with the shortstop, or vice versa.

With no one on base the catcher should keep his bare hand out of the way and be a one-handed catcher. With two strikes on the batter he has to be a two-handed catcher since the batter can advance to first on a missed third strike.

On pitches to the first base side of the diamond the catcher shifts his body weight by stepping toward the ball with his right foot. He can then throw by pivoting on that foot and stepping with his left foot.

On pitches to the third base side of the diamond the catcher shifts his weight by stepping toward the ball with his left foot. Then he brings his right foot back of the left, steps

with the left, and is ready to throw. Actually, this is a hop, with the right foot replacing the left.

When a ball is thrown over the plate, the catcher simply shifts his weight to his right foot and steps with his left.

The catcher should remember that the secret in throwing runners out is not how strong his arm is but how accurately and quickly he can get the ball away. He should get as close to the batter as possible, after he has given the signals, and be ready for any runner who might advance.

The position of the catcher's hands is very important. He should catch all low balls with his fingers down, and all high ones with his fingers up. One of the best suggestions we ever heard was, *catch everything to the belt*. Catching in this manner does away with false body motions in coming to the throwing position. Many young catchers catch fast balls with the fingers up and curve balls with the fingers down. They also move up closer to the batter on curve balls since they know most curves are thrown low and they want to avoid the ball going into the dirt. We have coached third base many times and called every pitch, due to these faults of the catcher.

By catching everything *to the belt*, the back of the catcher's hand, or side, will be toward the hitter and will lessen the chance of a split finger. The catcher should keep his thumb tucked under the index finger. This is an absolute must if he does not want it split open by a foul ball.

In giving a target, the high target is given with the fingers up; the low target with the fingers down. The bare hand is close to the gloved hand. The catcher should not move the target; he should hold it steady. If the pitcher is throwing at a part of the catcher's body, the catcher should spread his hands with his fingers

down. Another advantage of catching everything *to the belt* is that balls which are just a bit high, low, inside or outside, will often be called strikes, due to the smooth retraction of the ball. He should never develop the habit of jerking the ball. When an umpire sees the catcher jerk the ball, he will automatically call the pitch a ball.

As we pointed out, speed and accuracy are the necessary requisites in throwing runners out. The catcher should always throw overhand except on an occasional snap throw to first or third. Bunts may be thrown in any number of ways. In throwing, his arm is cocked behind his ear, and the proper steps, according to the pitch, are taken. The catcher throws from his shoulder, and does not make a sweep of his arm as an outfielder does. If he does make a sweep, his throw will be too slow. Any catcher can master this technique if he works on it.

On force-outs the catcher should stand with both feet on the front of the plate and then shift according to the throw. If the throw is from the first base side of the diamond, he should reach for the ball with his left foot on home plate. He should also have the point of his spikes in the ground to keep from slipping. This point also holds true when he is reaching to the third base side of the diamond for a throw.

In tagging runners the catcher should face the player who is making the throw. He can either straddle the plate, or stand to one side of it. If the throw is from the right field side of the diamond, the catcher stands in foul territory on the third base side of the plate. If the throw is from the left field side of the diamond, the catcher stands on the first base side of the plate in fair territory. In this way he can block the plate with both knees or plant one foot in front of the plate and drop on the opposite knee. In tagging the runner, he should try to tag him with two hands. The back of his mitt should be toward the runner to avoid injury.

Even if the runner knocks the mitt off his hand, the catcher still has the ball gripped in his bare hand. Sometimes he only has time to tag the runner with the ball in his bare hand.

If the throw is wide, he should go after it. Then if he has time he should dive for the third baseline with his arms outstretched.

When fielding bunts or slow hit balls, the catcher should have his body to the third base side of the infield.

(Continued on page 56)

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# QUALITY COMPARISON CHART

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| <b>LONG STRETCH ELASTIC</b><br>pulls easily over hips        | YES               | NO             | NO             |
| <b>3-INCH WAISTBAND*</b><br>for better anchorage             | YES               | YES            | NO             |
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**W**ELL, there he goes! The coach has just said goodbye to the only boy who could earn points for his track team in the broad jump. Now he is off to enhance the reputation of some college coach, and the high school coach is faced with the problem of starting at the bottom and teaching a new boy to broad jump.

What boy on the track team can take his place? The coach could double his sprinters. Very often that is done. Some of the best broad jumpers were primarily 100 or 220 men. A coach can also select a hurdler if he is a pretty strong boy. However, it should be remembered that the broad jump can tire a performer very rapidly. A high jumper should not be selected unless he really shows a knack for the event because the continuous landing jolt he will have to take in a meet will tire him out for both events, and instead of gaining a broad jumper, the coach may just lose a high jumper. Then there is one other boy who should never be underestimated. That is the boy who does not seem to have the necessary ability for any particular event but who wants to broad jump more than anything else in the world. He will do it, too, with the coach's help. The desire to do a job is a wonderful conditioner.

Now the coach has the boy — all that is left is to teach him the technique. The beginning broad jumper should not be permitted on the runway until his legs and back are in tip-top shape. They are the parts of his body which are most likely to be injured in the broad jump. The beginner should be started out on the quarter-mile, striding it, of course. Let him run from 70 to 80 seconds, maybe two or three quarter-miles a day. This boy should be given plenty of loosening up exercises such as bicycling in the air, hip circles, bending, stretching, toe touching, somersaults, and waist levers to stretch and limber his legs and back. As he becomes loose and limber, he should be brought down from the 440 to the 220, still striding easily, and then deep knee bends, sit-ups, and leg lifts should be added to his workout. An upper body routine of push-ups, chin-ups, and loosening up work should be carried on simultaneously, but this is not as important as the lower body work.

As the boy rounds into shape, in about two weeks, the coach should bring him down to the 100 and have him start to run faster. By this time he should be fairly strong-legged and ready to move onto the runway.

The very first thing the boy will

# Teaching the New Broad Jumper

By **Richard Calisch, Lieut., U.S.M.C.**

**Track Coach, Marine Corps Base,**

**Camp Lejeune, North Carolina**

want to do is jump and the coach should allow him to go ahead. Through careful observation the coach can learn two things: First, he will notice the length of run the boy feels is natural. Second, the coach will be able to see with which foot the boys wants to hit the board. The boy should not be allowed to jump too long, and at this point form or distance should not be considered.

It is a good idea for the coach to turn the boy around and have him run from the pit to the place on the runway where he has been starting his run, placing his take-off foot squarely on the board as he runs. It is the coach's job to notice at what place on the runway that same foot hits nearest to his former starting spot. Do not let him check his steps or hop, skip, and jump to hit the spot. He must run evenly all the way down the path and trust his coach to catch the proper foot fall. It will be 8, 10, 12 or 14 steps depending upon his preference. Less than that number of steps does not allow time to build up speed, and additional steps will tire him out. By starting him two steps behind the foot fall which the coach has marked, and running him toward the pit, his foot should now fall squarely on the board. If not, a little juggling will usually adjust it. The line on the runway should be moved, but the boy's runway stride should not be changed.

At this point the jumper should be able to run from behind his pre-marked line to the board, evenly and uniformly at near top speed. The jump itself, which should be added at this time, may shorten up his run. However, by moving the check line in toward the pit he should be able to hit the front edge of the take-off board just right every time. If the

boy desires a second check line, it may be placed 6 or 8 running steps from the board. In this way he will be able to check the correctness of his run on the way down the runway.

At this stage the jump itself usually requires no teaching because most boys can undertake a broad jump with ease. In this event the coach must recognize and correct mistakes in form.

Before starting to correct the boy, it is advisable for the coach to let him jump once or twice without any remarks. Just have him run and jump as far as possible, and for the purposes of motivation measure his jumps. On these preliminary jumps watch his legs, arms, and head in particular. His legs should lead his body and should be brought up to the height of his hips. The boy should be told that when he jumps he should reach out with his legs. A piece of white paper could be placed in the pit at the point where he landed on his last jump. Have him reach for the piece of paper with his legs, and at this point do not worry about the hitch kick.

The jumper's arms which should be swinging vigorously up at the take-off must then reach forward toward his feet. Have him try to touch his toes in mid-air. He may not do it, but the consciousness of trying will often provide that necessary forward swing to his arms. The boy's head should be up, and his chin high. In mid-air his body should form an elongated letter C with his head rising above the forward edge.

In order that the boy's maximum capabilities be realized it is necessary that his broad jumps be high as well as long. To emphasize this point a simple exercise may be used. Place a low hurdle on each side of the pit about 9 feet from the take-off board

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# NEW ITEMS

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**"TRAMPOLIN Training Rig"** is the name given to this piece of apparatus. It is used to teach the more advanced trampoline actions and stunts. The rig anchors securely to the trampoline frame and no bolts are required. The apparatus is designed for either indoor or outdoor use and when used indoors there is no need for worry about marring the floor because it is rubber shod. It comes complete with ropes, pulleys, and safety belt. Manufactured and distributed by Fenner-Hamilton Co., 824 W. 14th St., Denver 4, Colo.

**THE "Sterling Nylon Golf Net"** is made of 100 per cent nylon mesh that is both light and strong. The net requires very little space and because it is light it is easily erected. It cannot rot or mildew and is not affected by weather which means that the net can be used outdoors as well as in the gymnasium. It comes in two sizes, 10'x10'x20' and 16'x16'x20'. The smaller size is for one golfer and the larger one will accommodate two golfers. Sterling Net and Twine Co., Box 464, Boston 2, Mass.



**THESE** new aluminum alloy starting blocks have a center beam of oak to give them strength and rigidity. The bottom is closed to prevent sinking in soft tracks, and the foot blocks are oversize (4"x5"). Overall length is 2 feet and the weight is 6½ pounds. These blocks have fine grooves in the faces, thus helping to secure a good solid footing. The anchor rods fit inside the beam for carrying purposes. Sport Specials, Box 202, Denton, Texas.

**THIS** versatile standard has permanently engraved markings for the high jump. It also has adjustable eyebolts at official heights for volleyball, badminton, tennis, and paddle tennis. In addition, the top is equipped with an eyebolt for tetherball. The standard is made of aluminum and includes an aluminum base plate and bronze floor plates for indoor installations and an aluminum ground sleeve with a cap and extension insert for outdoor installations. Jayfro Athletic Supply Co., Dept. C, Box 1065, New London, Conn.



**THIS** new model pitching machine permits batting practice either indoors or out. It will pitch regulation baseballs, tennis balls, sponge rubber balls or softballs the full regulation distance at the rate of 8 or 9 a minute. The Varsity is made of heavy 16-gauge steel and weighs approximately 100 pounds. It can be adjusted to throw fast balls, slow balls, and even curves. The machine is inexpensive to operate, using any 100-volt, 60-cycle, AC-current. Dedoes Industries, 2070 W. Eleven Mile Rd., Berkley, Mich.

**RICHARD CALISCH** was a member of the 1950, '51 and '52 track teams at Illinois and then in 1953 assisted Jim Kehoe with track at the University of Maryland. During the latter year he competed in the indoor meets in the East and since then has been with the marines, competing as a member of the Quantico and Camp Lejeune teams.

and stretch a string or tape between the hurdles. Let the boy jump for distance while at the same time jumping over the tape. As he improves, move the tape out to 10 or 11 feet. The better jumpers should clear the string easily.

The coach must watch for uneven jumps which are caused by a jumper favoring a right or left arm. They can be spotted by a twisted landing in which the boy lands on his side or in which he lands to the side of the pit. When the boy lands on the left side of the pit or with his left shoulder ahead of his right, usually he has used his left arm the hardest.

The most frequent fault noticed in beginning broad jumpers is the fall-back. How many times have we seen a broad jumper let loose and push a jump out beyond the nearest competitor only to fall back in the pit and lose two or three feet. In most cases this error can be prevented by having the jumper concentrate on a final forward push with his arms and shoulders just as his feet hit the pit. If the jumper is conscious of the fact that he is susceptible to fall-back, he can put his energy into a forward surge of his head, shoulders, and arms just as his feet dig into the sand and check his flight. Even if this does not always throw the boy's entire body forward, it will enable him to fall sideways out of the pit instead of backwards, thus saving many an otherwise bad jump.

The most common faults and the best methods of clearing them up are as follows:

1. *A jumper's hitting the pit while the rest of his body falls forward.* In this instance his legs were not raised high enough in the air, and the initial jump was not strong enough.

2. *Falling back in the pit on landing.* The arm motion was not vigorous enough. A harder arm swing is necessary at the take-off, and at landing as the jumper's feet strike the sand.



3. *Low jump.* The boy should jump harder and more vertically at the point of take-off. He should practice with string at hurdle height.

4. *Landing on the right or the left side of the pit or with one shoulder twisted forward.* This error is caused when the jumper runs down the side of the runway or uses a weak motion with one arm at the take-off.

5. *Hitting the take-off board in a different spot on each jump.* The run on the runway was not uniform. The jumper should work on 220's and 100's.

6. *Slow run on the runway.* The run should be lengthened to allow more time to build up speed.

7. *Slowing down at the take-off.* The boy should practice take-offs for form and use string for height. He should shorten his run to avoid over-running.

At one time or another the coach will probably find his jumper exhibiting some of these faults. A little time and know-how should clear them up; a little practice should perfect the jump; a little encouragement should add inches to the boy's mark. The boy can only supply the practice; the coach must supply everything else.

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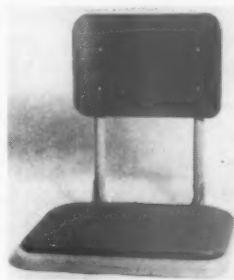
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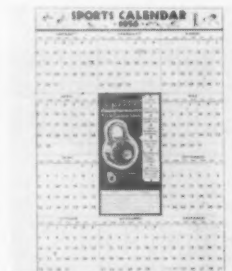


**S**EPARATE sections of this new 16-page catalog are devoted to Nissen Regulation Junior and Jump-King Trampolines, the Mini-Tramp, optional equipment and parts, and many instructional aids. There are illustrations and descriptions of each model plus complete specifications, shipping weights, and prices. Also of interest is a listing of more than 5,000 Nissen Trampoline installations throughout the world. Copies of the catalog may be secured by writing Nissen Trampoline Co., Dept. O, 200 A Avenue, N.W., Cedar Rapids, Iowa or by using the Service Coupon.



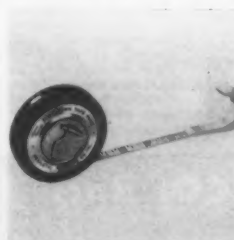
**I**N these days of mounting costs, additional means of revenue are always welcome. Renting stadium seats has proven to be very profitable at many institutions. The seat is 10½" deep and 14½" wide and features a new center pivot hook which stays locked in "down" position by spring action. Two recessed screw holes make possible permanent installations where desired. The metal parts are finished in baked-on-enamel and the seats may be had in school colors. Scott Port-A-Fold, Inc., 748 Middle St., Archbold, Ohio.

**T**HIS handy 22"x34" sports calendar is printed in two colors and has protective metal strips at the top and bottom, with double eyelets at the top for easy hanging. The calendar has ample space under each date of the school year to record future schedules or meetings. It was prepared as a service to athletic administrators and coaches by Master Lock Co., 2600 N. 32nd St., Milwaukee 45, Wisc. A calendar may be secured by writing the company or by checking the listing on the Service Coupon.



**J**OHAN T. RIDDELL, INC., pioneer in plastic helmets, has come out with a new model which is called the "TK." The initials stand for "Tru-Kurv." The new shape is streamlined, but being a true curve, it is structurally much stronger. While this helmet is slightly lighter than the previous model it feels much lighter to the wearer. This lighter feel is due to the perfect balance which has been engineered into the helmet. It is made of "Kra-Lite" in all school colors and combinations. John T. Riddell, Inc., 1259 N. Wood St., Chicago 22, Ill.

**W**E are happy to announce that the popular "Firm Grip" is now available in this handy aerosol spray can. Just spray it on one hand and then rub the hands together. If the hands pick up dust or dirt from the floor or ball, merely wiping them with a damp towel restores the effectiveness of "Firm Grip." The can holds 6 ounces which is good for 500 applications and the school price is \$1.25. The Cramers of Gardner, Kansas.



**W**ITH the "Moose Krause First Down Tape Rule" it is only necessary to measure the distance from the nearest chalk line to the lead pole on the sidelines. Then check that distance against the ball on the field. This eliminates the need for the chain-gang going on to the field, thus speeding up game time. The plastic hook fits around the pole and the 25-foot flexible steel tape has large black numbers on a white surface. Athletic Products Co., Box 86, South Bend, Ind.

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## The 100 Best Football Plays of the Last Five Years

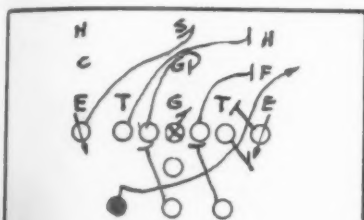
In each of our March issues for the past five years we have carried a review of High School Football Offense. During this time 447 plays have been diagrammed and explained. For our thirty-fifth anniversary issue we are presenting the 100 best plays carried during this period of time. We wish to thank Bob Voights, former Northwestern University football coach, for his assistance in selecting the 100 plays which are presented here.

Diagrams 1-46—T Formation

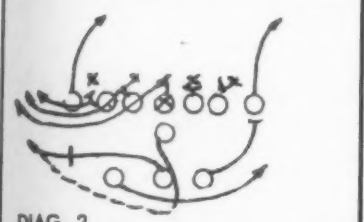
Diagrams 47-68—Wing T

Diagrams 69-79—Split T

Diagrams 80-100—Single Wing



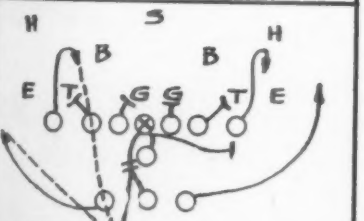
DIAG. 1



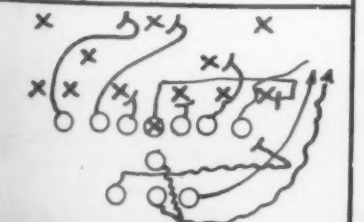
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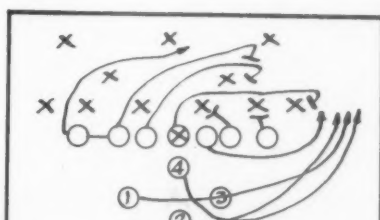
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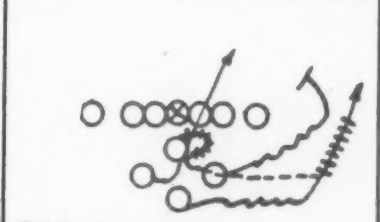
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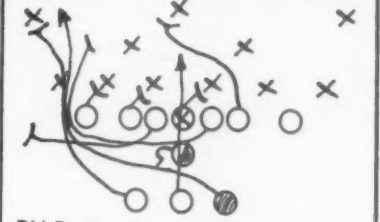
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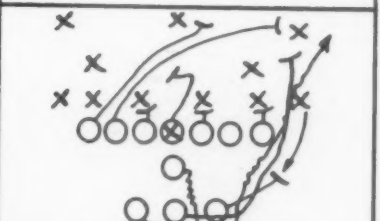
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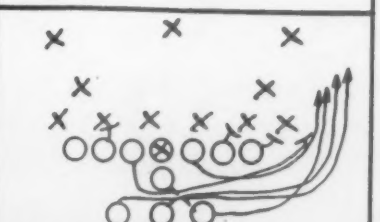
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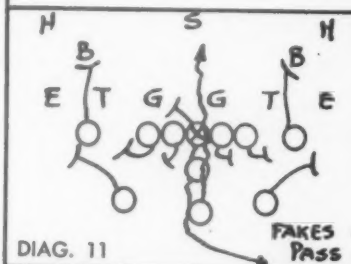
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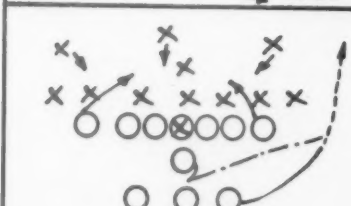
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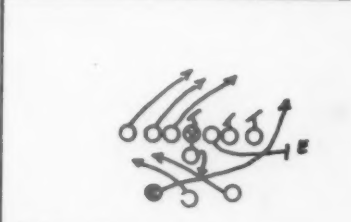
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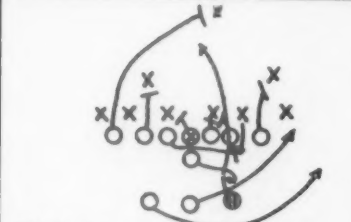
DIAG. 11



DIAG. 12



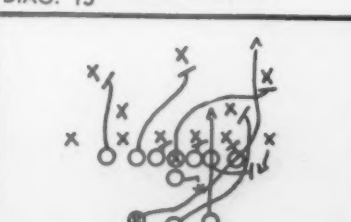
DIAG. 13



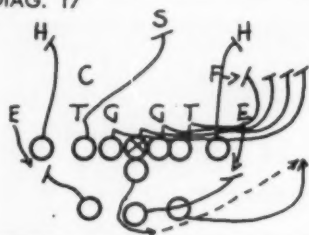
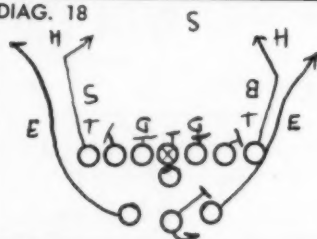
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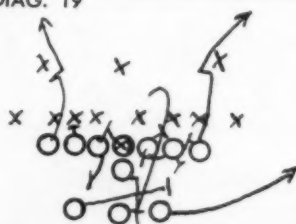
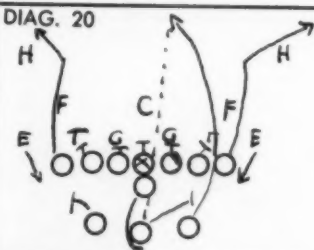
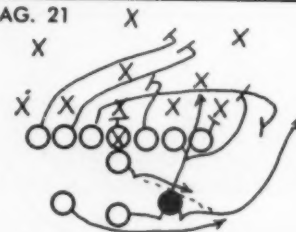
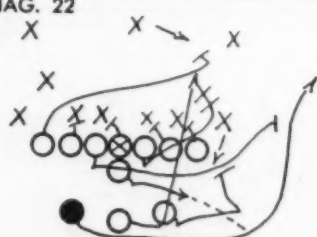
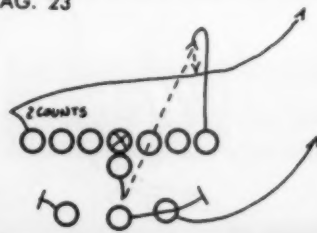
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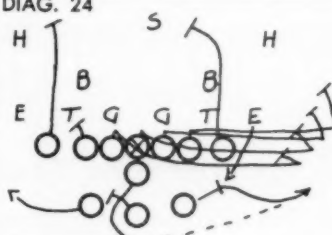
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**DIAG. 17****DIAG. 18**

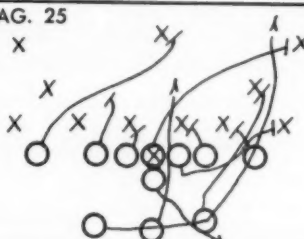
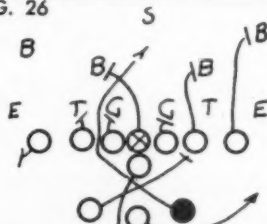
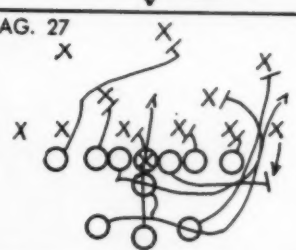
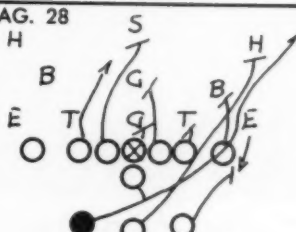
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**DIAG. 20****DIAG. 21****DIAG. 22****DIAG. 23**

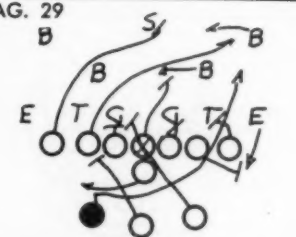
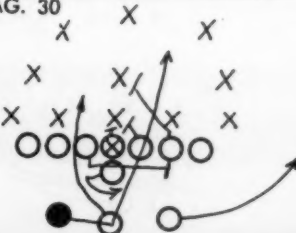
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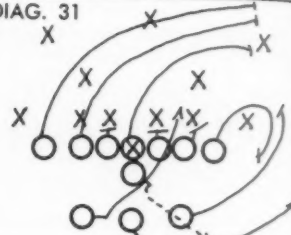
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**DIAG. 26****DIAG. 27****DIAG. 28**

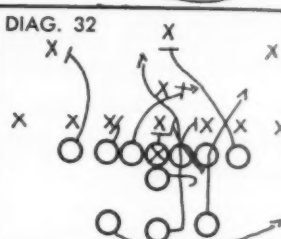
**DIAG. 29**

**DIAG. 30**

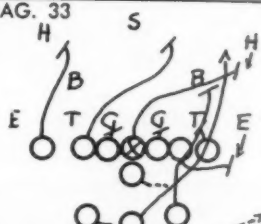
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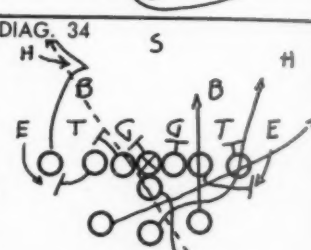
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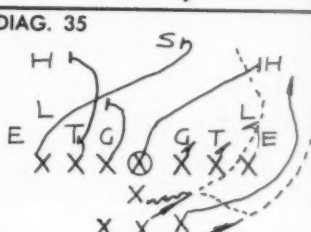
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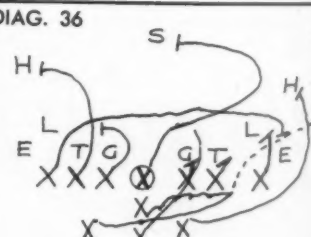
DIAG. 34



DIAG. 35



DIAG. 36

**DIAG. 37**

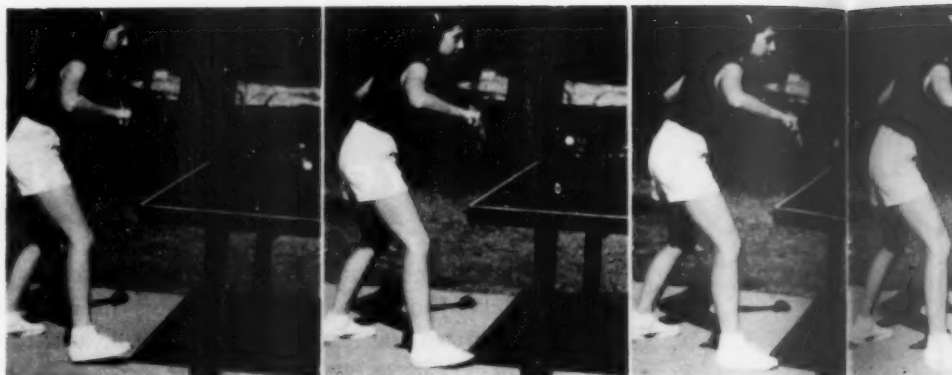


## FOR YOUR BULLETIN BOARD

This feature is arranged so that it may be easily removed from the Athletic Journal without damaging the magazine. Simply open up the two staples, lift out the form, and then fold back the staples. Feature No. 1 was on the serve in table tennis and Feature No. 2 covered the three backhand shots in badminton. Copies of both the first two features are available at 15 cents each.

## BACKHAND BLOCK

The backhand and forehand blocks are the easiest and simplest shots to use in returning a ball to an opponent. The player stands close to the table and as the ball starts to bounce he returns it with an easy pushing motion. He keeps the top of the paddle tipped back so the ball will have back spin. He returns it high so it will be sure to clear the net before it drops. The paddle starts close to the player's body and is pushed directly forward in the direction he wishes to place the ball on the opposite side of the table. He should keep his body sideways to the table and his right foot forward.

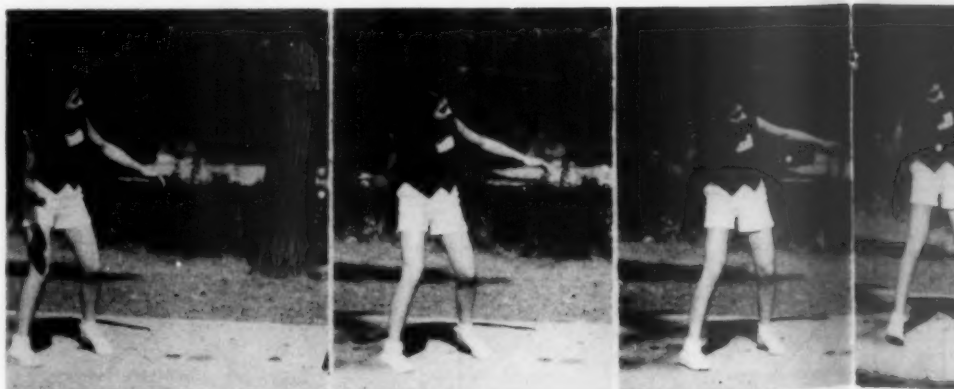
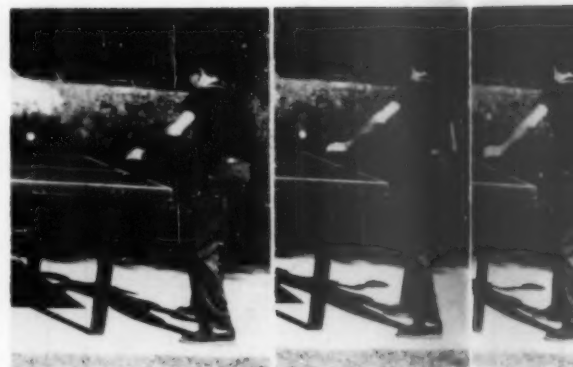


## FOREHAND DRIVE

Most players want to learn the forehand drive first, but in order to win they must master the defensive shots such as the block and chop shots. The player's left foot should be forward and his body turned sideways to the table. Then the paddle is brought back to gain speed. It will be noticed that the paddle goes forward and up in an arch-like motion above the player's head. Then the ball travels forward and down due to the top spin. A player should stand closer to the table when he drives than he does when he chops. The paddle angle is almost perpendicular to the table and waist high when he hits the ball.

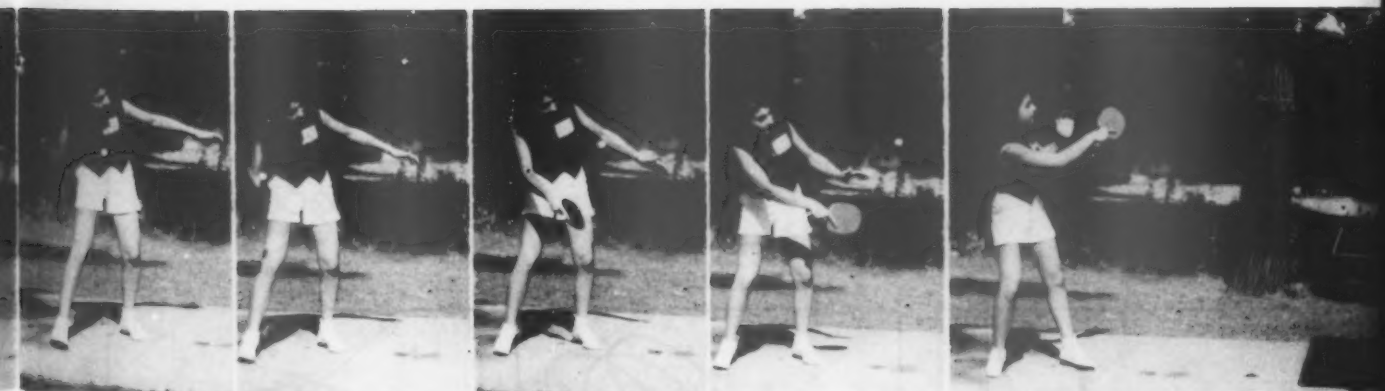
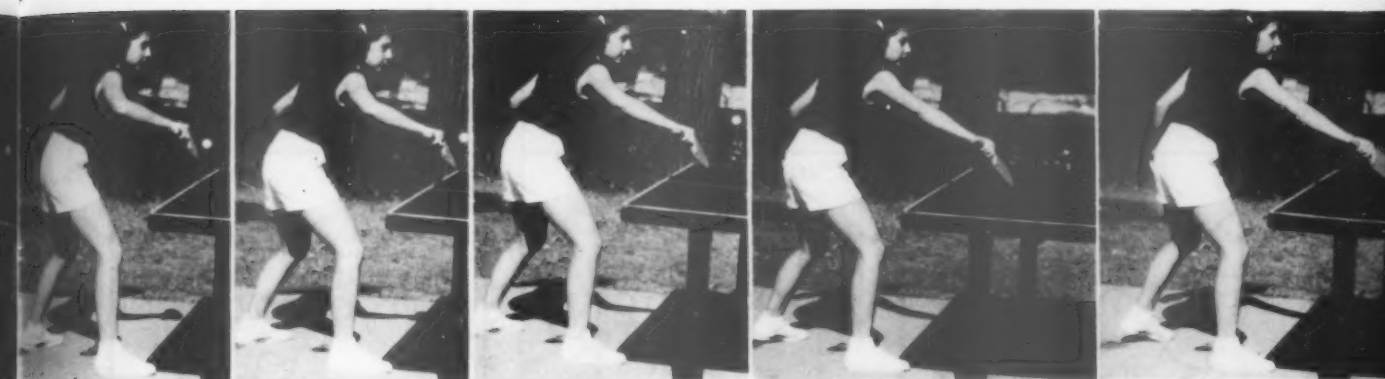
## FOREHAND CHOP

The chop or defensive shot should be the second stroke a player learns. He should start with his footwork, his body should be sideways, and his knees bent slightly, ready to move in a position far back from the edge of the table. This distance from the table depends upon how hard the ball is hit to the player. In other words, the harder the ball comes, the farther back a player would stand. He should start the paddle about waist high and move it backward to get speed as he meets the ball. Then the player strokes forward in an arch-like motion, connecting with the ball at about waist height. The paddle goes down and forward to give the ball a back spin. Then the ball goes forward and is high off the table, but it drops quickly as it crosses the net. The player's left arm is held out to help balance his paddle arm as it swings. When it hits the ball, the blade of the paddle is tipped back slightly at the top.

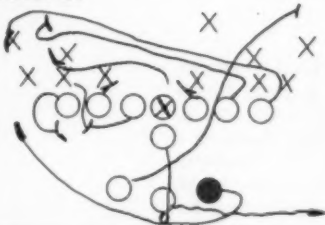


**KOEHNKE (All-American Champion) and NORBERT VAN DER WALLE (National Boy's Champion)**

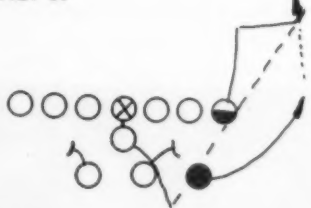
This series of pictures shows the three basic strokes in the game of table tennis. Notice that all shots are taken in fast action. The backhand block or push shot is the first shot a player should practice because it is the simplest and surest way to return the ball. Basically, this is a defensive or half-volley stroke. With this shot a player can keep the ball in play until he decides to attack or defend. The forehand drive is second, and is considered the game's most colorful shot because it means attack all the way. A player's biggest defensive weapon is the forehand chop because the hardest drives can be returned in such a fashion that they sail back over the net with the greatest of ease.



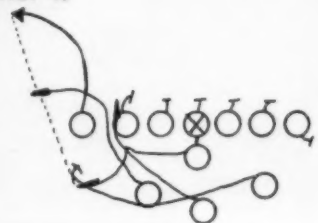
DIAG. 38



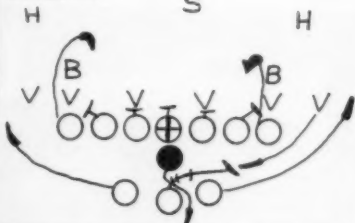
DIAG. 39



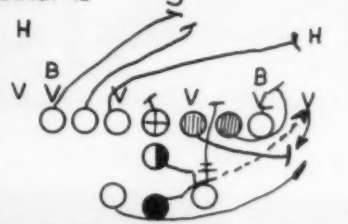
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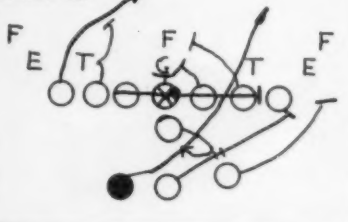
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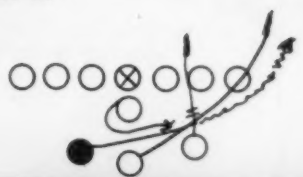
DIAG. 42



DIAG. 43



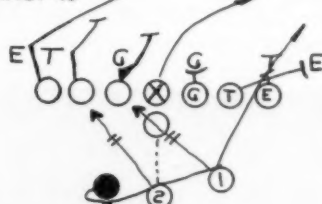
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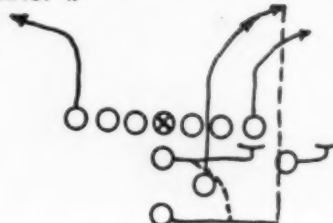
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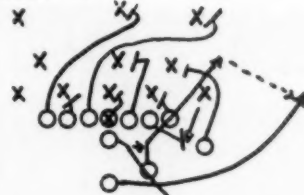
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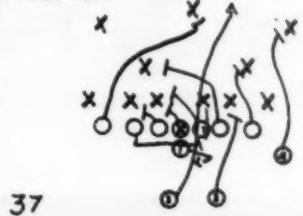
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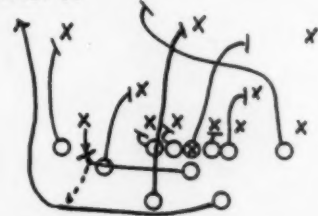
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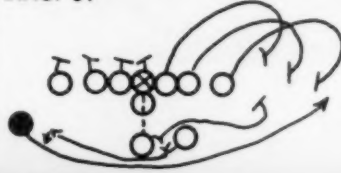
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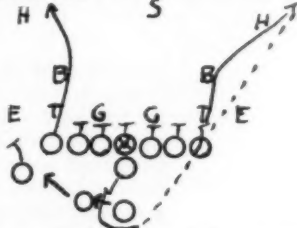
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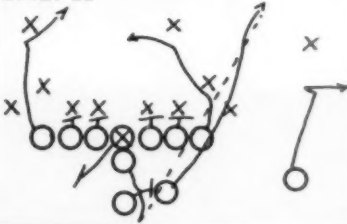
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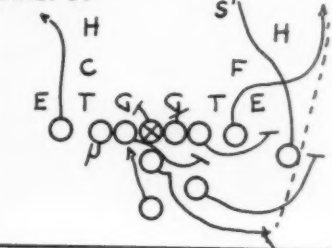
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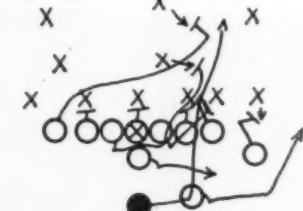
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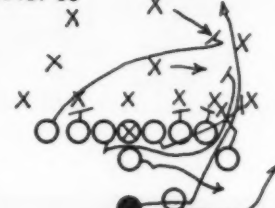
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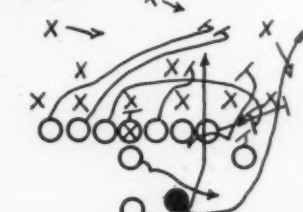
DIAG. 55



DIAG. 56



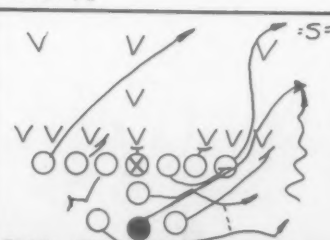
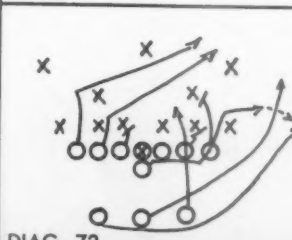
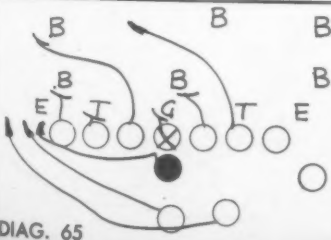
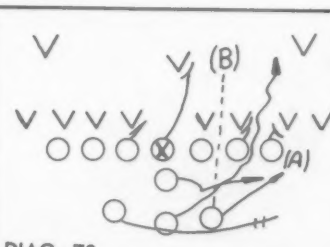
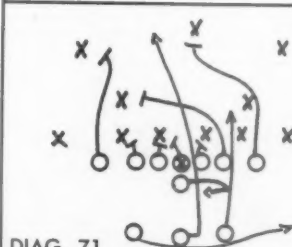
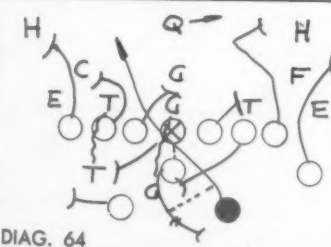
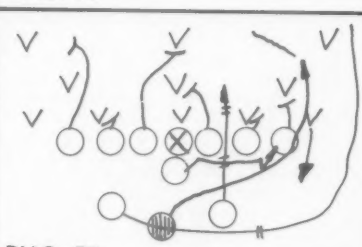
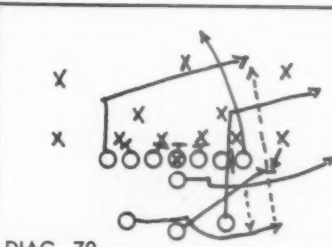
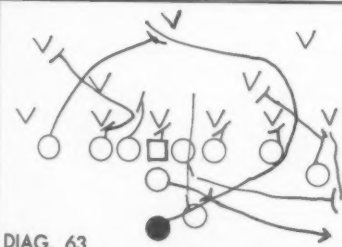
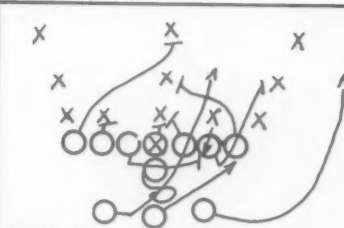
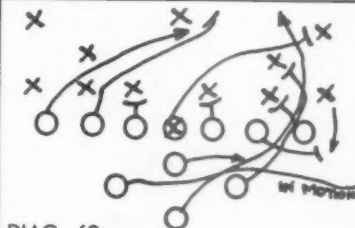
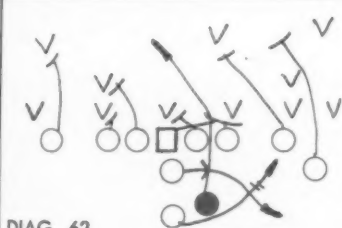
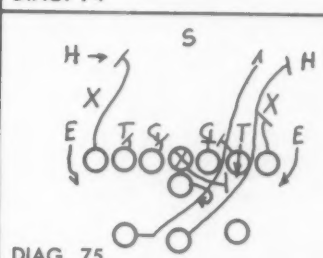
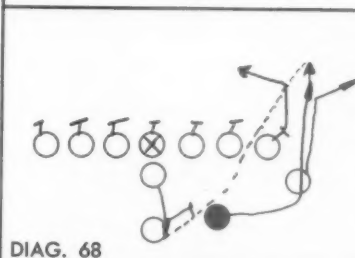
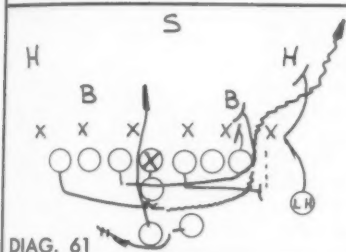
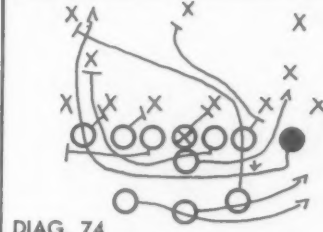
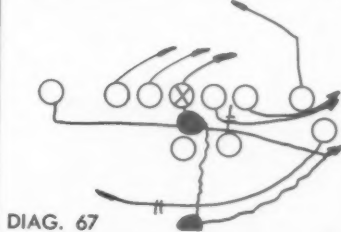
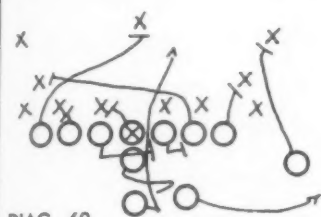
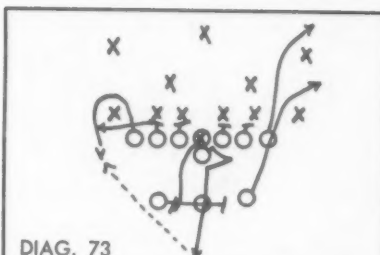
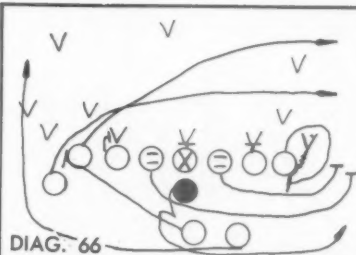
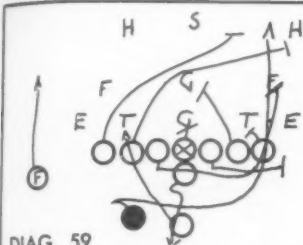
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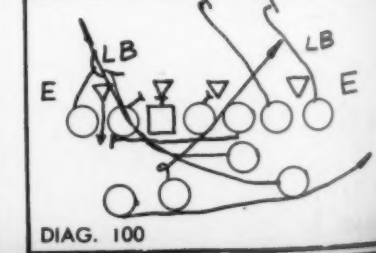
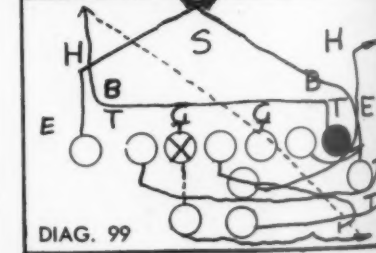
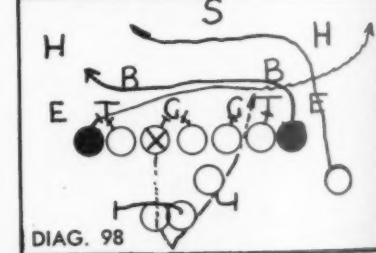
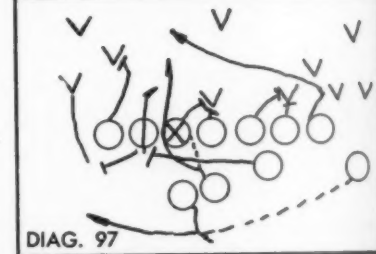
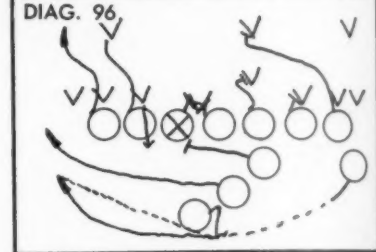
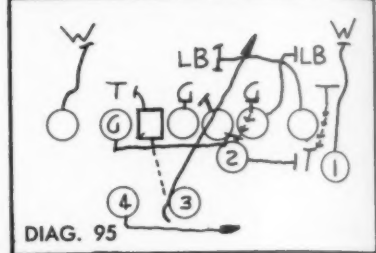
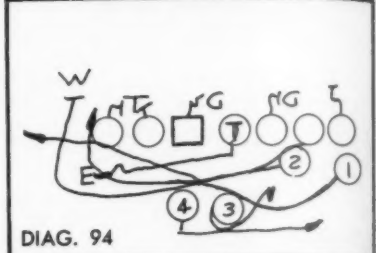
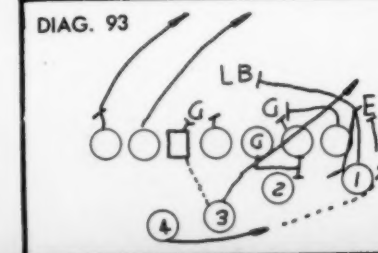
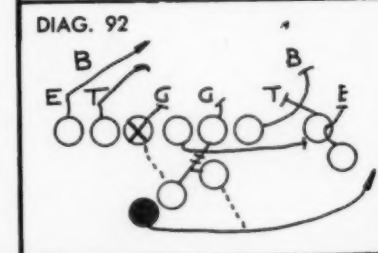
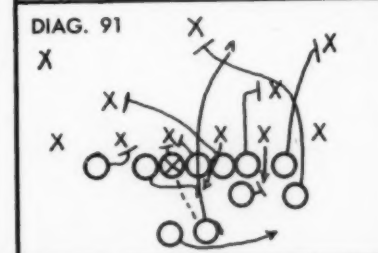
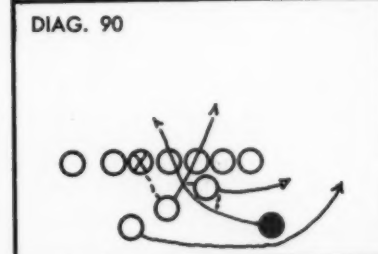
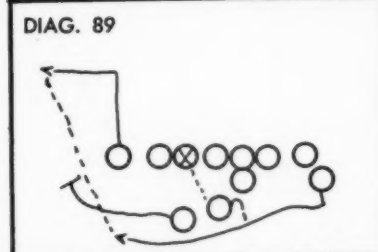
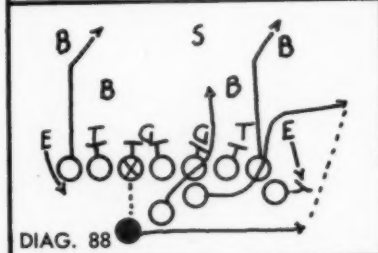
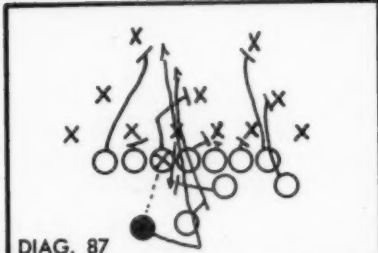
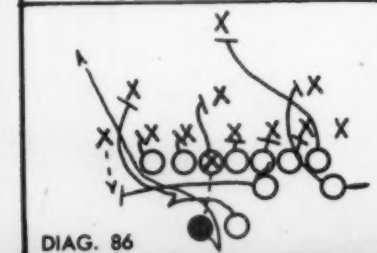
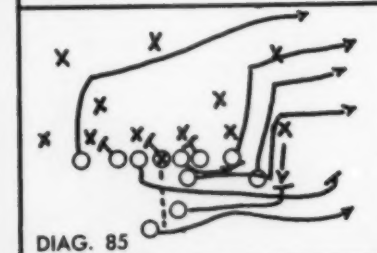
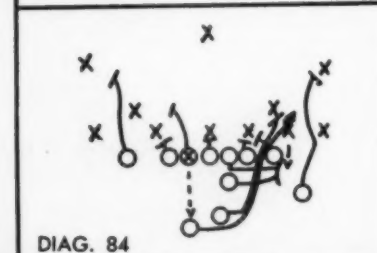
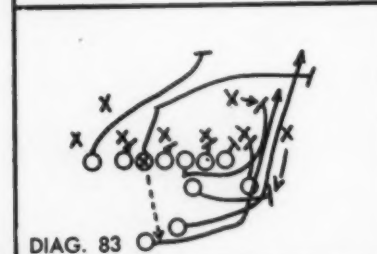
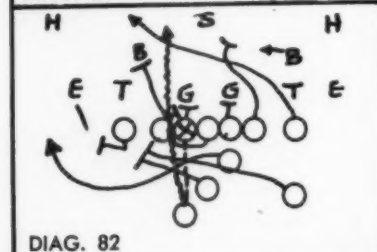
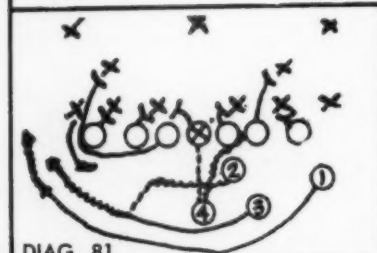
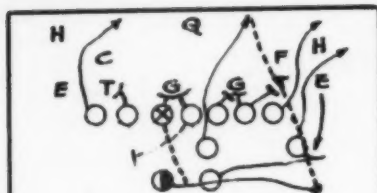


DIAG. 58









**How to In**  
**Rex Peery**  
pared by  
distributed  
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This is a booklet in "how to" style. The skill is explained with photos and various skills. Theaters on and Ride and Escape, then terms, a on available features.

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Superb little booklet on good gymnastics come across but they depicted gymnastics including ropes, beams, ladders, and benches partner trampolines booklet read and given to

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# New Books

**How to Improve Your Wrestling**, by Rex Peery and Arnold Umbach. Prepared by the Athletic Institute and distributed by A. S. Barnes and Co., 232 Madison Ave., New York, N. Y. Ninety-six pages. Price 50 cents. Publication date Jan. 18. Received for review Jan. 18.

This is the eleventh instructional booklet in the Athletic Institute's "how to" series. Every fundamental skill is explained in detail and 298 photos are used to illustrate the various skills. The booklet includes chapters on Take-Downs, Break-Downs and Rides, Pinning Combinations, and Escapes and Reverses. In addition, there is a glossary of wrestling terms, a bibliography, and a section on available wrestling motion pictures.

**Gymnastics**, produced in collaboration with the Amateur Gymnastics Association of Great Britain and distributed by SportShelf, 10 Overlook Terrace, New York 33, N. Y. Forty pages. Price 50 cents. Published Oct. 1955, available for distribution in this country Jan. 24. Received for review Feb. 1.

Superb line drawings make this little booklet one of the best sources of good gymnastic material that we have come across. The captions are concise but they describe amply the action depicted in each case. All types of gymnastic activities are covered including those using medicine balls, ropes, beams, window ladders, rope ladders, parallel and horizontal bars, and benches. Vaults, individual and partner balancing, tumbling, and trampolining are also covered. This booklet must be seen to be appreciated and it is something that can be given to all would-be gymnasts.

**Planning School-Community Swimming Pools**, by Louis E. Means and Charles D. Gibson. Published by the California State Department of Education, 721 Capitol Ave., Sacramento 14, Calif. Fifty-eight pages. Price 60 cents. Published 1955. Received for review Jan. 20, 1956.

The bulletin is profusely illustrated and includes the following chapters:

for March, 1956

Swimming Pools are Valuable Assets; Guide to Co-Operative Planning of Swimming Pools; The Comprehensive Aquatics Program; Space and Facility Requirements for the Aquatic Program; and Types of Pools. We feel this bulletin would be invaluable to any school or community that is planning on building a swimming pool.

**Track and Field Athletics**, by George Bresnahan, W. W. Tuttle, and Francis Cretzmeyer. Published by G. V. Mosby Co., St. Louis, Mo. Five hundred and twenty-eight pages. Price \$5.50. Publication date Jan. 1956. Received for review Jan. 18.

In 1937, when this book was published, we said that here was the bible of track and field literature. Successive revisions and reprintings in 1947, 1950, and 1956 indicate the acceptance which the book has received. This fourth edition adds Francis Cretzmeyer, the University of Iowa's popular track coach, to the names on the cover. The edition includes extensive revisions in several chapters. Figures have been added and brought up to date and a feature has been added which we feel will prove very popular — namely, an outline at the beginning of each chapter.

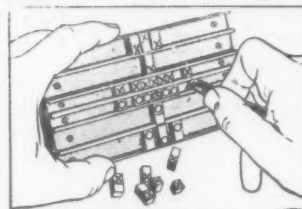
This is an excellent book on the sport of track and field and it deserves a center spot in every athletic library.

**Winning High School Baseball**, by Jim Smilgoff. Published by Prentice-Hall, Inc., Englewood Cliffs, N. J. Three hundred and fifteen pages. Price \$4.95. Publication date May 1956. Galley received for review Feb. 7.

Jim Smilgoff is a favorite author of ours, having started writing for us in 1944. Each year since then he has prepared several baseball articles for our pages. His years as a highly successful high school coach, tryout camp director, and scout for the Chicago Cubs have given him an acute baseball savvy — savvy which he discloses in detail in this book. To the readers of this publication there is not much we can say about Smilgoff's talent in

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getting his ideas across via the printed word. However, for the benefit of those who are not acquainted with his articles, we would like to call attention to the one appearing in this issue.

True, the book covers all the usual phases of the game, but it goes much farther, as witness the tips on breaking the batting slump, characteristics of good hitters, major batting faults and how to correct them, planning the line-up, etc.

This book has numerous diagrams and illustrations, and again we call attention to Smilgoff's article in this issue as an example of the type of material which is to be found in the book.

Although the title specifically refers to high school baseball, in many instances the material is advanced enough to be helpful to a major leaguer. The clear, concise, and well-illustrated manner in which the material is presented makes it suitable even for little leaguers. We predict a great future for this book.

**How We Do It Game Book**, by Fleanor Parker King. Published by the American Association for Health, Physical Education, and Recreation,

Washington 6, D. C. Two hundred and four loose-leaf pages. Price \$2.50. Publication date Jan. 1956. Received for review Jan. 23, 1956.

The book's pages are punched for insertion into a three-ring notebook cover, and a heavy Bristol stock was used for the various chapter dividers. Material for the book was taken from the *Journal of Health and Physical Education*. There are games of every conceivable type which involve the use of footballs, basketballs, baseballs, softballs, soccer balls, etc., just to give one an idea. If your program includes working with elementary grade children, then you will want this book.

**How I Teach Better Athletics**, by John Le Masurier. Published by Frederick Miller, Sudgate House, 110 Fleet Street, London E.C., 4, England. One hundred and twelve pages. Price \$1.46. Published 1955. Received for review Jan. 31, 1956.

The author was coach of the English team at the Commonwealth Games at Vancouver in 1954 and is one of his country's leading and most respected track coaches. Although the title may be misleading, the material

is 100 per cent on the subject of track and field and each chapter is devoted to one of the events. The book is illustrated with fine pictures of leading British track performers, both male and female.

**Handbook for Physical Education for College Women**, by Women's Physical Education Department of Florida State University. Two hundred and twenty-seven large-size pages. Price \$2.75. Publication date Jan. 1956. Received for review Jan. 20.

The various sports are covered in each chapter — each chapter being written by a member of the staff of the Women's Physical Education Department at Florida State in what appears to us to be a very complete and intelligent manner.

**All Out for the Mile**, by George Smith. Distributed by SportShelf, 10 Overlook Terrace, New York 33, N. Y. Two hundred and eight pages. Price \$3.75. Published Oct. 1955. Available for distribution in this country Feb. 14. Received for review Feb. 8.

The author is a famous British mile runner who competed in more than



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200 mile races against such famous milers as Lovelock and Wooderson. The book, as one might gather from the title, is a history of the mile run from 1864 to 1955 and all the great milers of the past and present are discussed at length. From a technical standpoint, there is much of value to be found within the covers of this book. For instance, the lap times and elapsed time for the first half-mile, three-quarters, and second half-mile are given for all the record performances as well as for the ten fastest miles. Incidentally, the ten fastest miles have all been run either during 1954 or 1955.

Also of interest is the preface written by John Paul Jones, the first holder of the world record, who took second place at the Stockholm Olympic Games. There is a short treatise on Physiological Aspects of Record Times by a member of the Institute of Physiology at the University of Glasgow. All in all, this is a book to which we can give whole-hearted approval.

## Reducing Injuries

(Continued from page 18)

A football player can make this joint stronger and less susceptible to injury by strengthening the muscles whose tendons pass over the joint and stabilize it. The athlete should also increase the flexibility or range of motion of the joint since ligaments and tendons with greater elasticity can be stretched farther without tearing than can those with little elasticity.

We will present some exercises which will strengthen the powerful quadriceps muscles of the front of the thigh whose tendons pass over this joint. On tensing the muscles of the thigh voluntarily, an athlete will notice the movement of the kneecap, and the tensing of the entire knee capsule at the same time.

Exercise No. 1. The athlete sits on



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a chair. Then he hooks the heels of his shoes over the lower rung and with his trunk erect raises the full weight of his body from the chair by contracting the thigh muscles and straightening his legs (Illustration 1). The exercise is repeated until the athlete is fatigued.

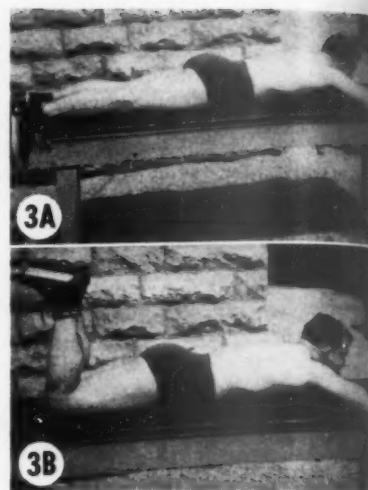
This exercise may also be done by passing a belt around his legs just below the kneecap and around the two front legs of the chair. The movement should be executed in the same manner.

**Exercise No. 2.** Illustrations 2A and 2B show another effective exercise for the quadriceps group which involves the use of iron boots or paving bricks. The iron boots are a body-building item found in the exercise room of most Y.M.C.A.'s. They are strapped on the athlete's feet. Paving

bricks can be used in lieu of iron boots by passing two short lengths of rope through the holes in the bricks and tying them to the athlete's feet. From a sitting position on the end of a bench (Illustration 2A) the athlete extends the lower part of his leg as shown in Illustration 2B. The exercise should be repeated until the athlete feels fatigued.

**Exercise No. 3.** This exercise is designed to help prevent damage to the cruciate (or crossed) ligaments whose job it is to prevent overextension of the lower leg. It incorporates the iron boots. Illustration 3A shows the starting position which finds the athlete lying on his abdomen with his legs extended. He flexes his legs at the knees and then lowers them to the starting position (Illustration 3B). Repeat the exercise until the athlete feels fatigued.

**Exercise No. 4.** This exercise is designed to strengthen the lateral stabilizers of the leg, the vastus lateralis. One iron boot is used at a time. The athlete starts the exercise from a standing position (Illustration 4). His leg with the boot is raised directly



sideward and then lowered. The exercise should be repeated until fatigue is noticed.

**Exercise No. 5.** This exercise involves all the extensors of the lower leg and thigh. In body-building language it is known as the deep knee bend. A towel is wrapped around the knurled center of the bar of a barbell

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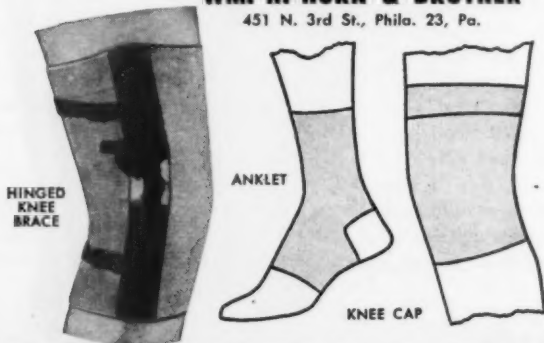
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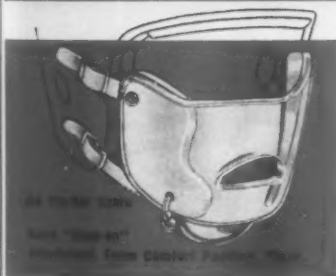
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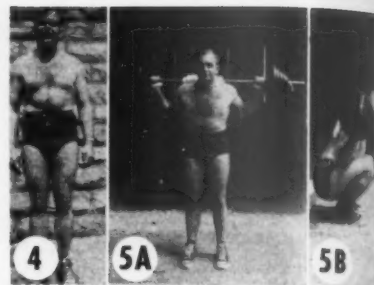
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which equal in weight one-half to three-quarters of the athlete's own body weight. He places the bar across his shoulders behind his neck (Illustration 5A). Now, keeping his back perpendicular and his heels flat on the floor, he squats as low as possible



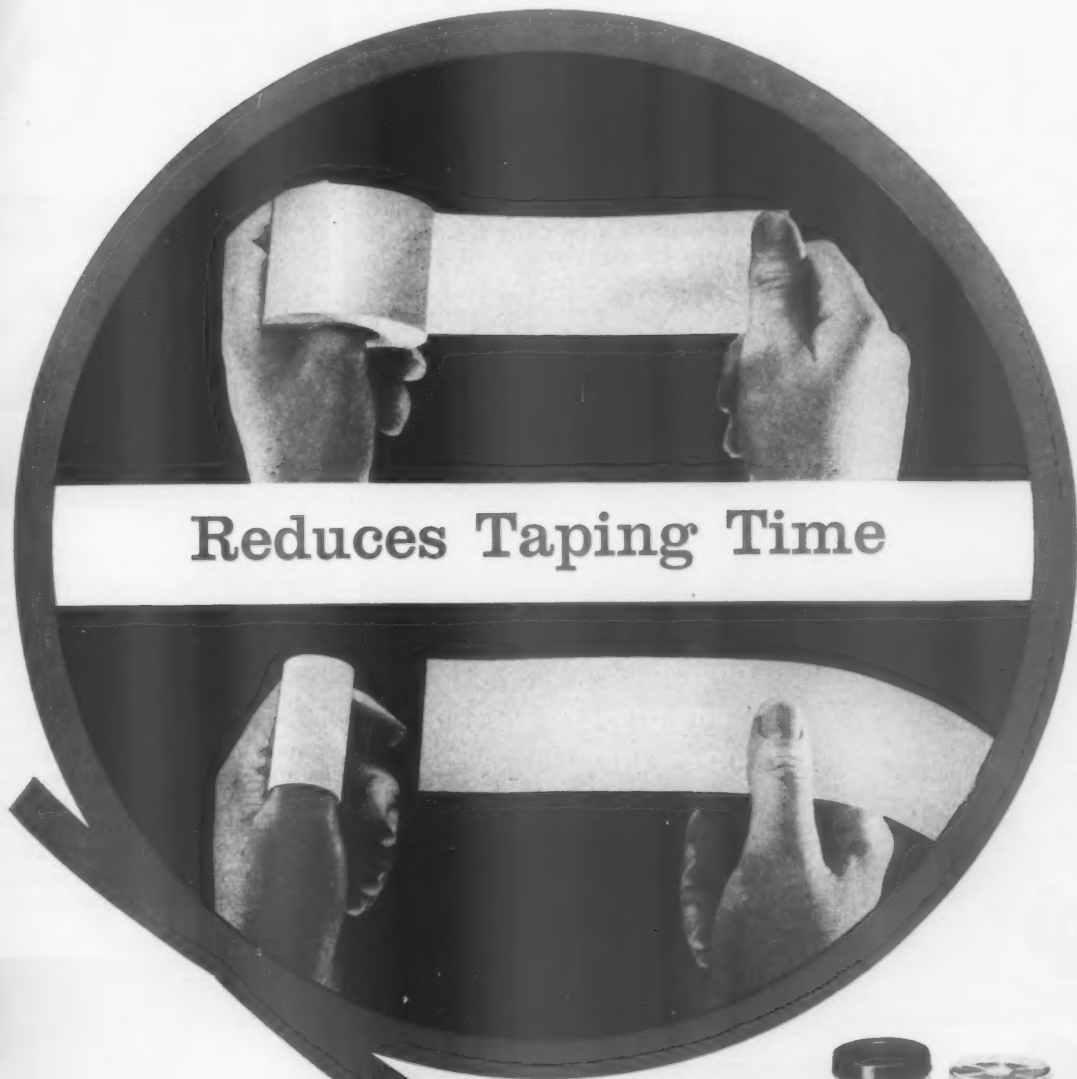
and returns to the erect position (Illustration 5B). This exercise should be repeated from 8 to 10 times.

Exercise No. 6. Walking and running are good exercises for the quadriceps, particularly if leg extension is emphasized by snapping the lower leg forward with each step. Running up





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steps is particularly good. This exercise will increase the flexibility of the knee joint. (*Exercise 6 needs no illustration, and the remaining illustrations are numbered to correspond to the exercise number—Editor's Note*)

**Exercise No. 7.** This exercise (Illustrations 7A and 7B) is started with the lower legs flat on the mat, toes pointed, and the athlete setting on his heels. Then he lowers his shoulder blades backward to the mat. He may assist himself with his hands. Repeat the exercise 10 times.

**Exercise No. 8.** This exercise is started with the athlete sitting on the

mat (Illustration 8A) legs extended in a straddle position, and his trunk erect. Then he grasps his ankles and pulls his head down to or alongside his left knee, keeping his legs straight (Illustration 8B). He returns to the starting position. Then he repeats to the right leg and returns to the starting position. The entire sequence should be repeated 15 times.

**Exercise No. 9.** Illustration 9A shows the start of this exercise with the athlete sitting on the mat, his right leg extended, and his left leg bent sideward in a hurdling position. He grasps his right ankle and pulls his



9A



9B

head to or alongside his right knee, keeping his leg straight (Illustration 9B). Then he returns to a starting position. This exercise should be repeated 20 times for each leg.

**Exercise No. 10.** This exercise is started with the athlete sitting on the floor, legs extended, and in a straddle position (Illustration 10A). He grasps his ankles and pulls his head to the floor between his knees, keeping his legs straight (Illustration 10B). This exercise should be repeated 20 times.

**Exercise No. 11.** In this exercise the athlete grasps the corner of a table and



10A



10B

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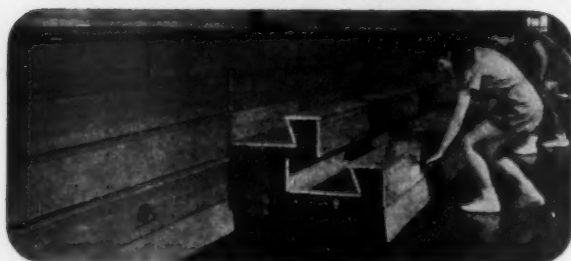
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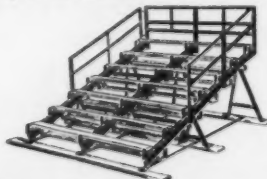
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squats down, keeping his back perpendicular, his heels flat on the floor, and his knees well apart (Illustrations 11A and 11B). This exercise should be repeated 30 times.

**How to Prevent Knee Injuries.** 1. Avoid throwing blocks after the ball is dead. 2. In the pile-up keep the knees flexed. 3. Most injuries are due to a blow when a player's body weight is over a locked knee joint and his cleats are locked in the ground. 4. Use push running—that is, running with the weight forward and feet always in back of the body. Push running can be practiced by pushing against a wall, raising the knees and pointing the toes (Illustration 12). This is an excellent exercise for the knees. This system of running gives an athlete speed and power as is evidenced by many of our great athletes. When a player's knee is locked his weight is forward and his foot will slide if hit.

**How to Avoid Blisters.** Blisters on the feet are quite common during early season practice. They not only cause considerable discomfort and limit performance, but they can cause a player to be benched. It is certain that they can take all the pleasure





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out of playing.

Early in the season a player's feet are not accustomed to wearing shoes as heavy and as stiff as football shoes. The process of adjustment must necessarily be a slow one.

Several procedures which should be followed in order to decrease the likelihood of blisters are as follows:

1. Keep the skin of the feet tough by painting them with a solution of tincture of benzoin.

2. Wear two pairs of socks when wearing football shoes.

3. Oil the football shoes regularly.

4. Allow football shoes to dry slowly after playing in the rain.

5. Tape a strip of adhesive over the Achilles tendon if it shows signs of irritation. This strip is taped on as shown in Illustration 13.

6. At the first sign of a blister the football player should report to his athletic trainer. By doing so he will actually save the trainer valuable time. He will also save himself considerable discomfort.

7. Do not tear off the dead white skin of the blister. This tissue helps to keep the under layer of skin sterile and also acts as a cushion for the tender area.

This article is by no means a complete summary of procedures which a



football player can follow to lessen the likelihood of an athletic injury. His coach and trainer will tell him of others. However, it is felt that these suggestions, if followed faithfully, will make a substantial beginning.

## The Pitch Shot

(Continued from page 14)

both hands should point over the player's right shoulder. Again, the inverted V means the area between the thumbs and the index finger. To learn this shot it is wise to select a short distance, not over 50 yards from the green. The player's hands and arms only go about hip high at the completion of the swing. He must get the ball into the air. As skill develops with practice, distance and direction will evolve.

In golf the beginner must learn the left hand position when he takes up the game. The grip is a habit and if the beginner can learn the right position at the start, he will do better with the various shots as he goes along. His left hand is the first hand

Illustration 1





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to grip the club and it must be in the right position in the beginning. At first the grip will not feel good, but as it becomes a habit, it will be natural for the player to grasp the club correctly with his left hand. The important factor is that the inverted V of the left hand should be pointing over the player's right shoulder. The three knuckles of his left hand (the little finger and the next two fingers) should be seen as the player looks down the shaft of the club. His thumb should be across the shaft of the club, with the joint of the thumb having a firm feeling against the shaft. Thus the pulling power of the left hand is insured (Illustration 1).

Illustration 2 shows the little finger of the golfer's right hand going between the forefinger and the next

**C**ONRAD REHLING graduated from Taylor University. Following service in the navy he received his master's degree from Springfield College. For the past seven years Rehling has been at Florida State where he has taught the fundamentals of golf to almost 5000 students. He is author of the book, "Golf for the Physical Education Teacher and Coach," published by Wm. C. Brown Co.

finger of his left hand. This point is important. The little finger of the right hand does not ride on the knuckle of the forefinger of the left hand. The next three fingers go on the shaft of the club. Notice that the player's right thumb is held away from his other fingers and his left thumb fits into the palm of his right hand. This grip gives unity of the hands.

In Illustration 3 the inverted V of both of the player's hands is pointing

Illustration 2



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Illustration 3

over his right shoulder. His left hand is gripped firmly with the little and next two fingers. In the case of the right hand, his thumb and the next two fingers grip firmly on the shaft

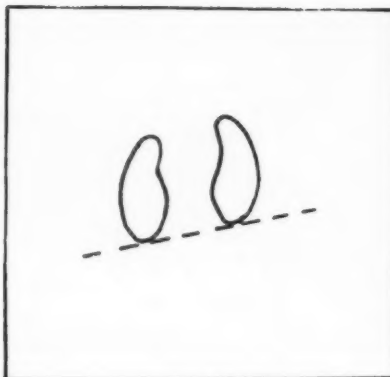


Illustration 4

of the club. His little finger should be between the forefinger and the next finger of his left hand. The three fingers of his right hand, forefinger and next two fingers, should be on the shaft of the club. His right thumb must be across the shaft of the club. The three knuckles of the left hand, little and next two fingers, should be seen as the student is in the address position. Players must understand that actually their hands oppose each other, and yet at the same time they must work as a unit. This

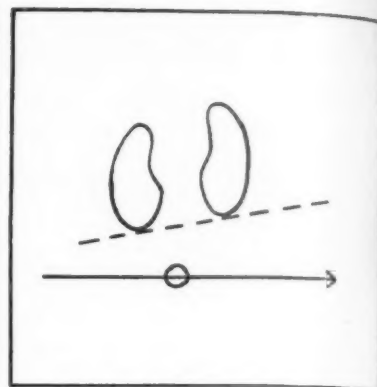


Illustration 5

is the reason the hands must be intertwined so they can work as one unit of operation.

In Illustration 4 the position of the player's feet is slightly open for this shot. His feet should be closer together.

Illustration 5 shows the directional line in relation to the alignment of the feet. The ball is played off the player's right foot, insuring good direction. Playing the ball off the right foot also gives the club a chance to dig down into the ball. This is the

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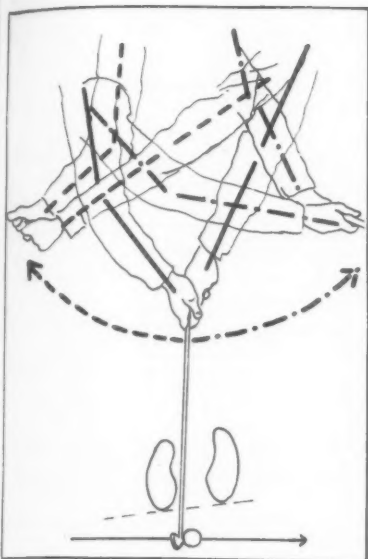
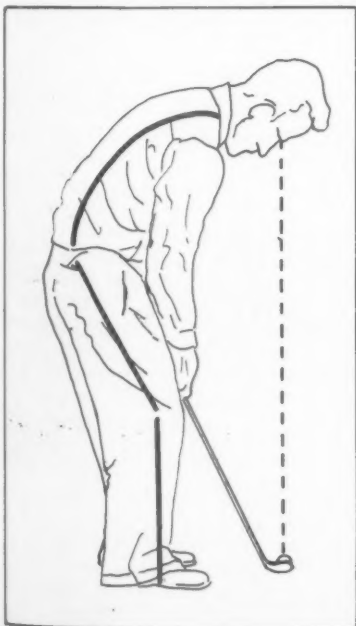


Illustration 6

prime factor in executing the pitch shot.

The position of the player's arms and hands in hitting the pitch shot is shown in Illustration 6. His left arm is straight, with his right arm close to his right side. His hands are drawn away from the line of flight and do not cock consciously. When his wrists reach the level of his hips, they will cock naturally and the student should not deliberately uncock them. As his arms come down into the ball, they should meet it as they were in the address position. In finishing

Illustration 7



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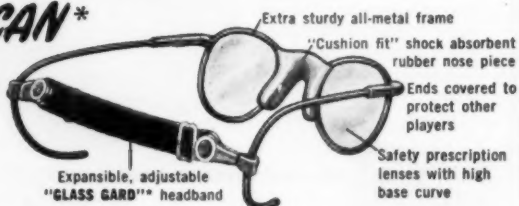
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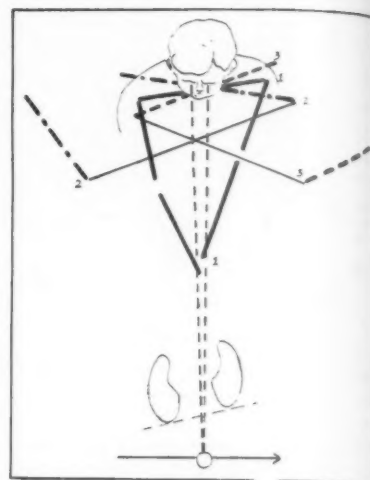


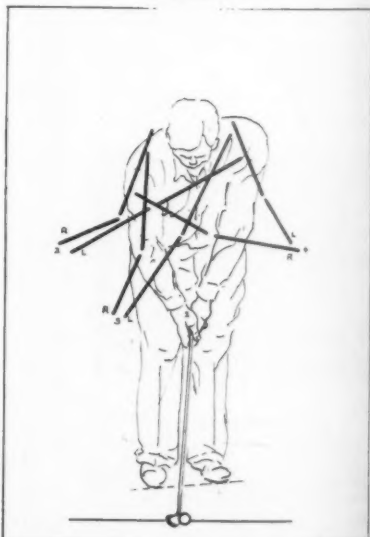
Illustration 8

the shot the player's arms do not extend more than hip high. This shot is for specific distance, and must be hit with a downward blow.

Illustration 7 shows how the player's spine is curved for the shot. It is important for the beginner to understand that his body has quite a bend for this shot. This is due to the fact that the club used for the shot is much shorter than some, and the shot is primarily for accuracy and not distance. The player's eyes are directly behind the ball; his hands are close into his body, helping to give the club guidance as it comes into the ball, and his knees are bent.

In Illustration 8 the No. 1 positions show the address position with the level of the player's shoulders. The No. 2 positions show the position of his shoulders going back on the back.

Illustration 9



swing. The No. 3 positions show the level of the player's shoulders as the club comes through the ball with the club going on through for the complete swing. Notice that his shoulders stay behind the hit. Also, the club meets the ball as it was in the address position. The player's head is tilted back behind the ball.

Illustration 9 shows the complete body position in steps marked to show what each arm does in relation to the body. The No. 1 position shows the player's hand and arms in the address position. The No. 2 position shows the arms at the top of the backswing. The No. 3 position shows the player's arms coming into the ball for the downward blow of the club. The No. 4 position shows the follow-through, indicating the arm position in the finished swing.

#### Teaching Tips for the Pitch Shot

1. Be relaxed in the address position.
2. Make sure the grip is correct.
3. Use the 7, 8, and 9 irons and the wedge.
4. The club comes into the ball in a descending blow.
5. The player's right elbow should be close into his right hip.
6. His left arm should be as straight as possible.
7. The players' heads should be held down to maintain body balance.
8. Use a minimum of body action.
9. The club does the work; the player should not try to guide the ball with his hands.
10. At the finish, the club should be pointing toward the target.

## Basketball Skills

(Continued from page 16)

ed (Table 1).

We used a five-point rating scale which is as follows:

**Excellent (5 points)** — Shows maximum effort and the player is ready for college freshman basketball.

**Good (4 points)** — Shows considerable practice, but the player needs polish and perfection.

**Average (3 points)** — Represents average progress in high school, but needs additional work.

**Fair (2 points)** — Needs a great deal of work in order to be ready for college freshman play.

**Poor (1 point)** — Shows little exposure in high school experience. Needs very concentrated coaching effort.

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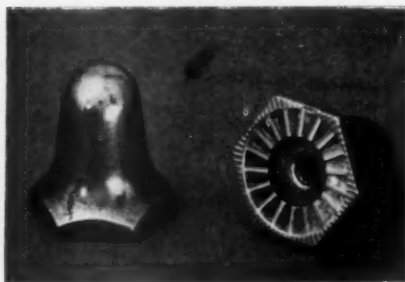
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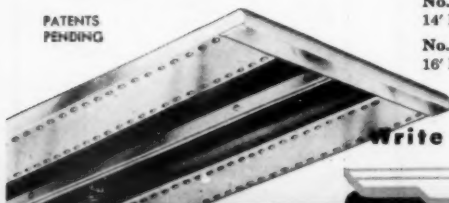
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ments, in addition to the use of the scale, were encouraged and received.

Thirty-five of the forty-two coaches contacted returned completed questionnaires for an 83 per cent reply. No follow-up letter was sent to non-respondents.

Table 1 shows a summary of the findings. On this basis the skills were ranked in order of excellence according to the point values assigned, as shown in Table 2.

Table 2

### RANKING OF FUNDAMENTAL SKILLS

| Fundamental Skill  | Total Points |
|--|--------------|
| Jump shooting  | 115          |
| Lay-up shooting, favorite hand                           | 111          |
| Dribbling, favorite hand                                 | 109          |
| Free throw shooting, one hand                            | 108          |
| Set shooting   | 99           |
| Ability to drive   | 91           |
| Rebounding, following a shot                             | 78           |
| Ball-handling  | 74           |
| Defensive use of hands                                   | 74           |
| Following pattern  | 71           |
| Faking   | 70           |
| Offensive footwork                                       | 69           |
| Free throw shooting, two hands                           | 67           |
| Setting and use of screens                               | 67           |
| Switching in a man-for-man defense                       | 66           |
| Stance, body balance                                     | 63           |
| Development of split vision                              | 63           |
| Ability to press   | 61           |
| Feeding the post   | 60           |
| Defensive rebounding, blocking out                       | 59           |
| Defensive footwork                                       | 56           |
| Ability to stay with a man in a man-for-man defense      | 53           |
| Dribbling, opposite hand                                 | 53           |
| Individual position in relation to the man with the ball | 52           |
| Lay-up shooting, opposite hand                           | 49           |
| Talking on defense                                       | 43           |

Four offensive skills lead the list by a wide margin. They are: jump shooting; lay-up shooting, favorite hand; dribbling, favorite hand; and free throw shooting, one hand.

At the other end of the rating list, it will be noticed that two offensive skills, dribbling, opposite hand; and lay-up shooting, opposite hand; and three defensive skills, ability to stay with a man in a man-for-man defense; individual position in relation to the man with the ball; and talking on defense were rated lowest of the twenty-six skills.

Some interesting observations can be made from a perusal of the findings.

1. It is not surprising to notice that jump shooting rated higher than set shooting.

2. Lay-up shooting with the opposite hand ranked very low and yet is a skill which, if improved, would undoubtedly add to the individual player effectiveness and increase team points throughout the season.

3. The one-hand free throw shoot



has become extremely popular in the West.

4. Dribbling with the favorite hand is a well-developed, skill, while dribbling with the opposite hand is a great weakness.

5. Ball-handling did not receive a very strong rating in spite of the fact that this skill is employed many times in each game by all players and is vital to good offensive team play.

6. Offensive footwork and faking received only average, fair or poor ratings, indicating a real area of weakness.

7. Ability to feed the post was also below average.

8. There was considerable lack of agreement among coaches concerning ability to follow a pattern.

9. Screening skills, rebounding, following the shot, and ability to drive all rated below average.

10. The defensive skills of footwork, man-for-man defense, pressing, talking, switching, individual position, rebounding, and split vision all rated less than fair on an overall basis. These findings add considerable evidence to the opinion, which is often expressed, that coaches are neglecting the teaching of defense.

11. The best defensive skills seem to be body balance and stance, and use of the hands, but even these skills are rated below average.

The following conclusions are evident from the data found in this study:

1. Offensive skills far surpass defensive skills.

2. As a category, shooting skills are the most highly developed of all basketball skills in this study. Four shooting skills were the only ones in the entire list of twenty-six skills which received a rating of excellent. These skills were set shooting, jump shooting, lay-up shooting, and free throw shooting.

3. Players have developed the favorite hand skills of jump shooting and dribbling to the neglect of the opposite hand. Coaching and practice should be stressed in the use of the opposite hand if more effective players are to be developed.

4. Offensive rebounding ranked much higher than defensive rebounding, which seems somewhat surprising. The high relationship of rebounding success to the winning of games would seem to indicate the need for increased coaching attention to both types of rebounding.

5. Many defensive skills received very low ratings. This study clearly indicates the need for greatly increased coaching emphasis on defensive skills at the high school level.

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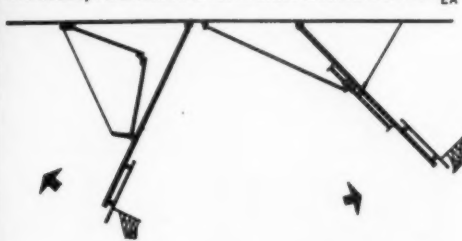
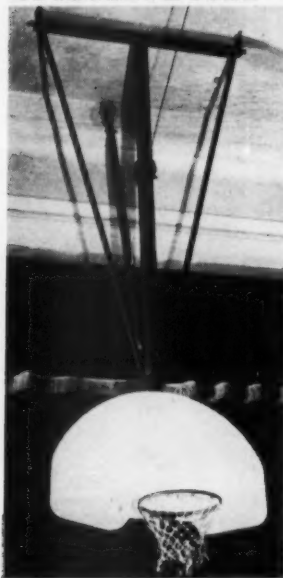
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## From Here and There

(Continued from page 4)

several instances in this column we have pointed out the great athletic careers of coaches. Chuck Mather, who heads the Suffolk County (New York) Coaches Clinic, the latter part of this month, points up the other side of the picture. He never played football in high school and only won three starting assignments at Ohio Northern, winning but one letter. All of his coaching career has been as a head coach . . . Correction — in the National Honor Roll which appeared in our January issue, we listed Willie a miler, at Columbus, Ohio. This listing should have been Columbus, Indiana.

## Catching Game

(Continued from page 20)

He sweeps the ball up and transfers his weight to his right foot. Then he takes a step with his left foot in the direction of the throw. If the ball rolls along the third baseline and the throw is to first base, similar foot work may be used with the catcher's body to the first base side of the ball. Then he must execute a left pivot.

If the ball is raised in foul territory, with very little wind, it has a tendency to rotate toward the playing field. It should be remembered that most right-handed hitters foul to the right. Similarly left-handed hitters foul to the left. One of the most important things for a catcher to remember is if a ball is fouled over his right shoulder, he should turn that way. The same holds true for a ball fouled over his left shoulder. If he turns the wrong way, he will find himself spinning like a top and the result is that he will drop the ball. The catcher should try to make the ball hit him on top of his head. By doing this he will find he can catch it easily at eye level, palms up, with a minimum of lunging or stretching.

In discarding the mask there are a few rules he should follow. If the ball is hit some distance away from the plate, he can just drop the mask over his shoulder. There is not much chance of his stepping on it. On a high ball hit near the plate, he should slide the mask over his head as soon as the ball goes up. He should locate the ball and throw his mask away so he will not step on it and stumble. He should be sure to throw the mask opposite to the way he is going. On a play at the plate he should throw the mask away.

The pitcher, catcher, coach or manager should go over the hitters before a game. Thus everybody receives an idea of the pitches the hitters are going to receive. During a game the catcher is alert for many things such as runners taking big leads, catching signs, mannerisms of batters, position of defensive men, etc. A good catcher notices these things, takes advantage of them or corrects them.

A good catcher also knows his pitcher. He knows his pitcher's best pitch, and he does not hesitate to call for it in a tight spot. He watches the pitcher for signs of fatigue, and encourages him at every opportunity. An absolutely infallible rule to have is: "When in a jam, make the batter hit the pitcher's best pitch." Then if he does hit it the catcher should not feel badly.

### Some Duties and Tips

1. The catcher must tell the cut-off man if he wants the ball cut off.

2. He should tell the infielders or the pitcher where to throw the ball on all bunt plays.

3. He must back up third on a bunt that the third baseman fields with a man on first.

4. On a batted ball, with the bases unoccupied, he covers first base.

5. He watches the infielders and outfielders. If one player is out of position, the catcher moves him over.

6. By watching the base-runners, he may pick them off with a snap throw if they are taking a big lead. If he senses a steal, the catcher calls for a pitch-out.

7. He should watch the batters closely. Their mannerisms often tip him off to their weaknesses.

8. The catcher should keep his body in front of the ball when receiving and not be a reacher.

9. In blocking a pitch he should try to fall on the ball and smother it. He should drop down to his knees.

10. The catcher should not work on a hitter's weakness, but try to get ahead first.

11. Late in a game he will probably have to catch all high fly balls in fair territory near the plate. At this time the sun is usually in the infielder's eyes, but it will not bother the catcher.

12. With two strikes and no balls on the batter, it a good policy to have the catcher give the pitcher a target squarely over the plate just below the knees. A batter will go for this pitch much quicker than he will for the wild, high inside pitch. Most two-and-nothing pitches are so bad that no batter is fooled or tempted.

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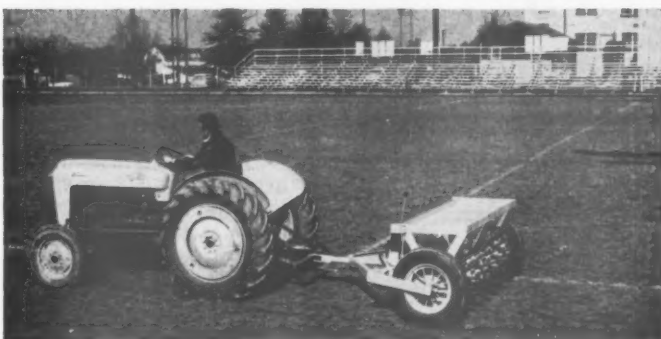
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## Ninth Fielder

(Continued from page 9)

home plate in case that runner should try to tag up and score after the catch.

### Backing Up Bases

When a single is hit to the outfield with the bases empty, the pitcher often backs up the return throw. Should the single be hit to right field the pitcher replaces the shortstop by backing him up while he is covering second base. When a single is hit to center field he lines up with the return throw, and takes a position between second base and the pitching mound. On a single to left field he replaces and backs up the second baseman.

With a base-runner on first base and a single hit to the outfield the pitcher backs up third base.

When the protective screen behind home plate is more than 50 feet back of the catcher, the pitcher usually backs up the receiver on all singles to the outfield with a base-runner on second base.

On all extra base hits the pitcher backs up third base or home plate, de-



### (Series C)

## COVERING HOME

pending upon the length of the extra base hit.

### Acting As a Cut-Off Man

Some coaches prefer using their pitcher as a cut-off man on all throws to home plate. Others use their pitcher in this position occasionally.

When the protective screen or backstop behind home plate is close to the catcher no backer-up is necessary. In this situation it is best to use the pitcher as a cut-off man on all throws to home plate except those made on extra base hits. In the latter instance the first baseman could be the cut-off man since he is not needed elsewhere, and the pitcher could back up third base.

### Fielding Pop Flies

At the high school level many coaches prefer having the pitcher, since he is usually a good all-around player, do his own fielding of pop flies near the pitcher's mound.







# Care of Physical Education Uniforms

By JAMES V. SULLIVAN

Equipment Supervisor, University of Delaware

THE University of Delaware is one of the few institutions in the East where complete gymnasium uniforms are issued to those male students who are required to take physical education. This article deals with the issuing, laundering, and checking in of this equipment, and the locker room at the University of Delaware. We hope its contents will be of help to those equipment managers who are interested in organizing an equipment system in the physical education program or to those already con-

cerned with such a system at the high school or college level.

Our male enrollment is approximately 1000 students. Since only the freshmen and sophomores are required to take physical education, there are, roughly, 400 students for whom physical education uniforms are issued. Moreover, physical education equipment is issued to junior and senior students for free time play and for the various intramural sports in which they may participate.

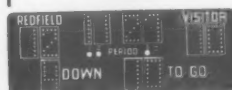
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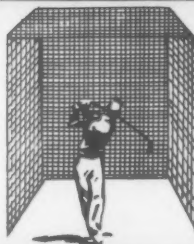
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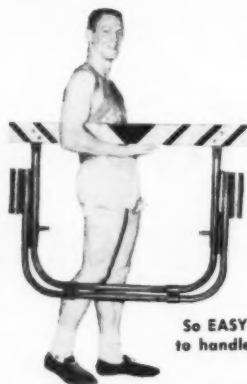


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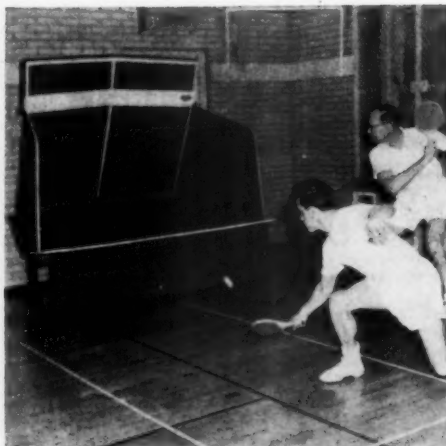
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in free time play activities may be  
assigned lockers if they so desire. Com-  
bination locks are put on each locker  
at the beginning of the school year.  
With such a large number of students  
involved, it can readily be seen that  
the task of administering this part  
of the physical education program is  
a big one.

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revolving washer, one extractor, and two 100-pound dryers. A student has the privilege of exchanging his complete uniform once a week, twenty minutes prior to his gymnasium class. He may exchange towels three times per week, each time his class meets. The department hires one man who does all the laundry and issues all physical education equipment.

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At the end of the school year, all students are allowed two weeks in which to turn in equipment. If it is not turned in at the end of this time, the equipment is taken from all lockers and any equipment that is missing is billed to the student through the business office.

On reading this article, we realize that this set-up is quite an extensive one for a small university and the furnishing of physical education equipment for so many students can be very costly. However it is not too costly if it is run efficiently and if losses are kept at a minimum. We believe that this aspect of our physical education program is a great asset to our physical education classes since uniformity of dress and cleanliness can be expected at all times.

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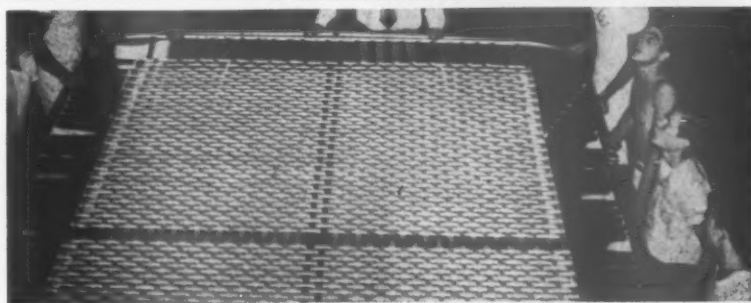
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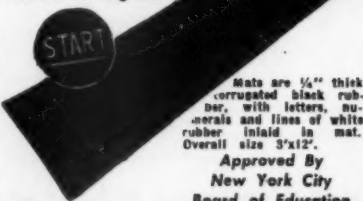
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## Discus Throw

(Continued from page 13)

Many weight men jump into the throw instead of concentrating on form and maneuvers to get into the best throwing position. We call it throwing from the back of the ring. The real effort should come after the thrower is in position and the actual throw has started. After the throw starts, a good relaxed effort just before the release gives added distance and keeps the thrower's feet firmly on the ground.

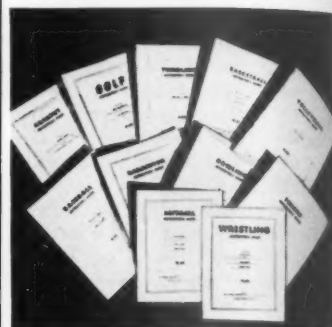
Carl told us the most confusing thing to him in high school competition was that too many people were trying to tell him how to throw. He ran into the same thing as a freshman here at Tech. His first competitive throw at Georgia Tech as a freshman was 161'8". A very good friend and a very fine discus man who was competing in the same meet was sincere in his efforts to help Carl, but in so doing really confused him for the balance of the season. We had to begin all over the following year.

We have never objected to having our boys listen to other people and get their ideas and we are very grateful for any help others may offer. However, it should be remembered that no two people do a certain thing in the same way.

Carl's best throw of 172'11" came in the Drake Relays to set a new relay record. At the time of his throw he was 6 feet, 6 inches tall, and weighed 230 pounds. Being a football player and playing on a bowl team each year he has been at Tech has eliminated any fall practice, but he loves to throw the discus and does not participate in spring football practice. We believe he is still a long way from his best mark.

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## The Growth of Games

IN thirty-five years of close association with the athletic programs of the nation's schools and colleges we have witnessed many changes. For example, the concept of physical education has changed. The days of formalized calisthenics and wand waving are a thing of the past. In their place is a program which advocates competitive games as a means of acquiring proper physical fitness.

As the pendulum swung away from the formalized program, the competitive games in existence at that time became increasingly popular. In addition, a search for new games and activities began. Limited facilities, means of teaching athletic skills, and varying age groups were some of the reasons behind the quest for new games.

Today we accept as commonplace, games and activities which were unheard of ten years ago. So much in demand are new games that those which fill a need will, in the future, be accepted practically overnight.

How are new games evolved? The story of the game "Smash" is interesting. It certainly follows a typical pattern of development.

In 1932 Mr. George Forsyth, the inventor of the disc wheel, worked out a game which could be played in a limited area. Thirteen years ago Henry Sistrunk, who has been active in Y.M.C.A. work in Chicago, was asked to pass judgment on the game. It was his feeling that instead of a table game it should be a floor game where sweeping strokes similar to those in tennis would be used.

As a result, the game was redesigned, and in 1953 the first game as it is known today was built. Because the game employs basic tennis strokes, it has found acceptance among tennis players. Australia's young tennis stars had occasion to play the game, and through their encouragement arrangements are being made to manufacture it in their country. Thus "Smash" takes on an international complexion within a period of two years.

The whole story of this game is indicative of the way the country, and the world are searching for new games and activities.

If we were asked to select the most significant development in the field of athletics and physical education during the past thirty-five years, the answer would have to be the emphasis upon games and competitive sports.

We think it is a healthy sign and hope that the physical education leaders of the country will continue to work out new games. The almost immediate success of these new games indicates there is a rapidly growing interest in, and need for, new activities.

## COACHES READY REFERENCE SERVICE COUPON

MARCH, 1956

As a service to our readers and for their convenience we list here the advertisers appearing in this issue. Many of the concerns offer free booklets and coaching aids. Simply cut along the perforated rule and mail to:  
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- |   |
|---|
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### CLOTHING & LETTERING

- |                                 |   |
|---------------------------------|---|
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| Kahn Co., Inc., Arthur, 46,     | <input type="checkbox"/> Information "Kahnfast" athletic fabrics                        |
| King-O'Shea Sportswear Co., 39, | <input type="checkbox"/> Information jerseys and football pants                         |
| Sand Knitting Mills Corp., 53,  | <input type="checkbox"/> Free 1956 catalog  |

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| Bike Web Co., 21,                               | <input type="checkbox"/> Information "Bike" supporters                          |
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| Dolge Co., C. B., 53,                           | <input type="checkbox"/> Free booklet on Athlete's Foot Control                 |
| Horn & Bro., Wm. H., 40,                        | <input type="checkbox"/> Information hinged knee braces, anklets, and knee caps |
| Johnson & Johnson, 43,                          | <input type="checkbox"/> Information "Controlled Tension" tapes                 |
| Seamless Rubber Co., Cover 3,                   | <input type="checkbox"/> Write direct to advertiser                             |
| Seron Mfg. Co., 56,                             | <input type="checkbox"/> Information "Glass Gard" eyeglass holder               |

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| Dedoes Industries, 50,                | <input type="checkbox"/> Free booklet   |
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| Fair Play Mfg. Co., 59,               | <input type="checkbox"/> Information electric scoreboards   |
| Fenner-Hamilton Co., 61,              | <input type="checkbox"/> Full details   |
| Globe Imperial Corp., 54,             | <input type="checkbox"/> Information  |
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| Gymnastic Supply Co., 27,             | <input type="checkbox"/> Free catalog   |
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| Harvard Table Tennis Co., 16,         | <input type="checkbox"/> Free booklets "Harvard Table Tennis Teacher" and "Harvard Tournament Charts" |
| Hussey Mfg. Co., 46,                  | <input type="checkbox"/> Free catalog and prices  |
| Jayfro Athletic Supply Co., 62,       | <input type="checkbox"/> Free catalog   |
| K. & P. Athletic Co., The, 57,        | <input type="checkbox"/> Name of nearest dealer   |
| Maggie Magnetic, Inc., 62,            | <input type="checkbox"/> Free catalog   |
| National Sports Equipment Co., 56,    | <input type="checkbox"/> Free circular  |
| Nissen Trampoline Co., 48,            | <input type="checkbox"/> Free catalog   |
| Perfo Mat & Rubber Co., Inc., 62,     | <input type="checkbox"/> Information  |
| Program Aids Co., Inc., 51,           | <input type="checkbox"/> Free catalog   |
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## SWIMMING SUPPLIES

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- Ocean Pool Supply Co., 52, ☐ Free catalog D

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- Michigan Peat, Inc., 55, ☐ Information  
Rolcor Industries, 51, ☐ Free catalogs  
West Point Products Corp., 57, ☐ Free booklet "Improving Athletic Fields"

## AWARDS & TROPHIES

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## FILMS

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Jordan Film Enterprises, Payton, 4, ☐ "Sport-Loops," \$3.00 ea; ☐ 10 films \$25.00; ☐ 15 films \$35.00

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Jayfro Athletic Supply Co., 26, ☐ See listing under "Gymnasium & Field Equipment"  
Marietta Co., The, ☐ Free catalog of face protectors  
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Nissen Trampoline Co., 27, ☐ See listing under "Gymnasium & Field Equipment"  
Riddell, Inc., John T., 27, ☐ Information  
Scott Port-A-Fold, Inc., 27, ☐ Information  
Sport Specials, 26, ☐ See listing under "Gymnasium & Field Equipment"  
Sterling Net & Twine Co., 26, ☐ See listing under "Nets"

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Athletic Institute, The, 62, ☐ See advertisement for list of books for sale  
Baxco Athletic Products, 27, ☐ Free folder  
☐ Basketball Score Board, \$4.95  
Prentice-Hall, Inc., 57, ☐ Information "Encyclopedia of Football Drills," George H. Allen  
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## Important Rule Changes

### NCAA

#### Football Rule Change

"Section 3, Article 1. The ball shall be a four-panel, pebble-grain leather cover without corrugation other than for seams or lacing and enclosing a rubber bladder. It shall be inflated to the pressure of 12½-13½ lbs. and have the shape and dimension shown by the diagram. Its weight shall be 14-15 ounces. *A rubber ball may be used by election of either team while on offense.*"

### NFSHSAA

#### Football Rule Revision

"1-3-1: This article will be revised to give *rubber or composition-covered footballs* which have been approved as meeting proper reaction and durability standards the *same status as that of a leather-covered ball*. It will also be provided that if the two competing teams cannot agree on whether a leather-covered ball or a ball with another type cover shall be used, each team may designate at the beginning of a half which type ball will be used when that team snaps or free kicks."

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